



November 16, 2017

Ms. Susan Morales
EPA Region 10
1200 Sixth Avenue, Suite 900
Mailstop: ECL-112
Seattle, WA 98101

Dear Ms. Morales:

Enclosed please find the City of Beaverton's application for a \$200,000 Cleanup Grant Application for the Beaverton Activities Center (BAC) site located at 12500 SW Allen Blvd, Beaverton, OR 97005. The BAC, located in an economically distressed community, has been identified as the future site of the Beaverton Public Safety Center (PSC), an earthquake resistant police and emergency management building. Beaverton residents passed a \$35 million bond in 2016 to fund the new PSC. The PSC will be a community asset that is intended to spur additional development in the surrounding blighted area. Planning and design for the PSC building are underway and construction is expected to begin in 2019.

This brownfield application focuses on one of Beaverton's most distressed areas in need of revitalization, part of Beaverton's Allen Boulevard Corridor. The Allen Corridor suffers from higher unemployment and lower per capita income than the city as a whole. The PSC will improve the safety and stability of the target area, and increase visits to local businesses from 200 police and city staff that will work at the PSC. On the corner of two high traffic routes, the development will become an anchor around which property owners and businesses can rally to revitalize their community. By creating a more attractive area for new industry and entrepreneurial ventures, brownfield redevelopment will reduce commercial vacancy rates and improve properties in the distressed Allen Corridor. Redevelopment will generate new tax revenue, allowing the City and its partners to better support community programs and social services. The petroleum contamination on site is already imposing health risks by penetrating groundwater and local streams. Timely action for redevelopment of the BCA is needed now.

The implementation of this grant will be managed by the City of Beaverton with assistance from the Oregon Department of Environmental Quality (ODEQ) and EPA Brownfields staff. The following information responds to requests in the NOFA required in the cover letter:



a. Applicant Identification: City of Beaverton, 12725 SW Millikan Way, Beaverton, OR 97005

b. Funding Requested

- i) Grant Type Indicate: Single Site Cleanup
- ii) Federal Funds Requested \$200,000
- iii) Contamination: Petroleum

c. Location: City of Beaverton, Washington County, Oregon

d. Property Information:

Beaverton Activities Center
12500 SW Allen Blvd, Beaverton, OR 97005
Tax Lot ID 1S121AA01700 and Tax Lot ID 1S121AA01800

e. Contacts

- i) Project Director: Captain Eric Oathes, (503) 526-2289, eoathes@beavertonoregon.gov, City of Beaverton, P.O. Box 4755, Beaverton, OR, 97076. The Project Director may be contacted if other information is needed.
- ii) Chief Executive/Highest Ranking Elected Official: Mayor Denny Doyle, 503.526.2222, ddoyle@beavertonoregon.gov, 12725 SW Millikan Way, Beaverton, OR 97005.

f. Population

- i) Population for the City of Beaverton is 93,919

g. Other Factors Checklist: Attached

h. Letter from the State Authority: Attached

Thank you for your consideration of Beaverton's application. Please contact me if you have any questions.

Sincerely,

Patrick O'Claire
Finance Director
Mayor Pro Tem

OTHER FACTORS CHECKLIST

Name of Applicant: **City of Beaverton, Oregon**

Please identify (with an X) which, if any of the below items apply to your community or your project as described in your proposal. To be considered for an Other Factor, you must include the page number where each applicable factor is discussed in your proposal. EPA will verify these disclosures prior to selection and may consider this information during the selection process. If this information is not clearly discussed in your narrative proposal or in any other attachments, it will not be considered during the section process.

Other Factor	Page #
<i>None of the Other Factors are applicable.</i>	
Community population is 10,000 or less.	
The jurisdiction is located within, or includes, a county experiencing “persistent poverty” where 20% or more of its population has lived in poverty over the past 30 years, as measured by the 1990 and 2000 decennial censuses and the most recent Small Area Income and Poverty Estimates.	
Applicant is, or will assist, a federally recognized Indian Tribe or United States territory.	
Target brownfield sites are impacted by mine-scarred land.	
X - Applicant demonstrates firm leveraging commitments for facilitating brownfield project completion, by identifying in the proposal the amounts and contributors of resources and including documentation that ties directly to the project.	9
Applicant is a recipient of an EPA Brownfields Area-Wide Planning grant.	

1. COMMUNITY NEED

1.a Target Area and Brownfields

1.a.i. Community and Target Area Descriptions: A first-tier suburb in the Portland metro area, Beaverton is a community with a population of 93,919. Beaverton's economy and population has changed dramatically over the past 40 years. Approximately 26% of Beaverton's workforce was employed in manufacturing in 1980, compared to just over 10% in 2009. The recession further increased industrial and commercial vacancies. Vacancy rates for industrial and office space in Beaverton are above metro-wide averages. A critical first step in attracting business was Enterprise Zone designation for Beaverton's industrial core. Enterprise Zone designation enables the City to provide tax relief for up to 5 years to eligible businesses. However, while tax abatement provides an attractive incentive for businesses to locate and expand in Beaverton, the threat of environmental contamination on many prime sites poses an additional hurdle. In addition, Beaverton residents are impacted by the regional trend in the recovery of low-wage and high-wage jobs following the recession, but little return in middle-wage and family-wage employment.

Beaverton prides itself on working cooperatively with its neighbors and has been preparing for the population boom that is ongoing in the region. The City is located within the Portland metropolitan area's Urban Growth Boundary. Metro (the region's Metropolitan Planning Organization) has designated Beaverton as one of seven Regional Centers that will absorb expected growth of housing and jobs in its Metro 2040 Growth Concept long-range plan. These Regional Centers will concentrate growth in dense, mixed-use, transit supportive development.

As Beaverton prepares to absorb this record growth, the City is committed to maintaining an exemplary standard of public safety. The City has been recognized for keeping crime low, but wants to concentrate additional safety and economic development resources in targeted distressed neighborhoods. Crucial to that goal is the construction of a new Public Safety Center that will house a new police station, emergency operations and community service center. Site assessments for the facility ultimately identified the Beaverton Activities Center (BAC) at Allen Blvd and Hall Blvd as the best location. Central to three major patrol districts, the site will significantly enhance emergency response time and improve public safety services for the community. Unfortunately, the BAC site's brownfield status poses health risks by penetrating groundwater, and timely action is needed.

The BAC is in the middle of one of Beaverton's most distressed areas, the Allen Blvd Corridor (Allen Corridor) which suffers from higher unemployment and lower per capita income than the rest of the City. Beaverton wants to work closely with EPA and Oregon Department of Environmental Quality (ODEQ) to build upon the community's long-term commitment to redeveloping brownfield sites for reuse, ensure a safe and healthy environment, and attract private investment to one of the City's most distressed areas.

1.a.ii. Demographic Information and Indicators of Need: Demographic data for our Target Area, the City, State of Oregon and United States of America are summarized below. This data demonstrates the significant level of economic and social distress within the Target Area, providing a compelling basis for Target Area selection and project focus.

Data Type	Target Area ¹	Beaverton	State of Oregon	United States
Population	5,953	93,919	3,900,343	316,127,513
Unemployment Rate	10.28%	8.70%	5.60%	8.30%

¹ The Target Area is defined by Census Tracts 310.03, 310.05, 311, and 312. All data for the Target Area are averages of Census Bureau data for each Census Tract. Source: U.S. Census Bureau American Community Survey 5-Year Estimates, 2011-2015.

Poverty Rate	22.50%	15.40%	16.70%	15.50%
Child Poverty	33.63%	21.60%	21.70%	21.70%
% Minority Population	46.13%	39.13%	14.90%	37.80%
Median Household Income	\$48,893	\$56,882	\$50,521	\$53,889
< High School Education	16.34%	10.19%	10.50%	13.70%
Land Area (sq. mi.)	3.38	19.63	95,988.01	3,531,905.43

Beaverton, like the rest of the US, has finally seen a decrease from double-digit unemployment rates over the last several years. However, the Target Area continues to lag behind the rest of the City, state and country in unemployment, poverty and job growth.

As evidenced by the demographic table above, the Target Area has a poverty rate 7 percentage points higher than the national average and nearly 6% higher than the state, and the median income in the Target Area is 14% less than the City's median income. As one of the most ethnically diverse cities in Oregon, these statistics disproportionately impact Hispanic, Asian and African American populations. Unfortunately, the consequences of these statistics are not contained to adults in the workforce. One out of ten children in the Beaverton School District (BSD), where more than 90 different languages are spoken, live below the poverty line. More than 37% of students (over 13,000 children) receive free or reduced lunch benefits, an increase of 4 percent from the previous year, and BSD's tally of 1,580 homeless students during the last school year is the highest number ever recorded in Oregon. As an area of concentrated poverty, students from the Target Area are more likely to be at risk for homelessness.

1.a.iii. Description of the Brownfields: Beaverton secured an EPA Brownfields Assessment grant in 2013 to determine the level of contamination and resources necessary to revitalize nine sites. These sites range from less than 0.5 acres to over 45 acres and include a mix of previous industrial uses, including food processing, paper milling, rubber/silicone/plastic manufacturing, electronics manufacturing, window manufacturing, battery production, carpet recycling, auto sales, and gas stations. The resulting brownfields have produced a negative psychological impact on Beaverton's residents by delaying investment and contributing to blight. Many of these properties disconnect downtown neighborhoods as they remain vacant or underutilized. Abandoned properties have also attracted crime, and new development has bypassed downtown and the Allen Corridor for undeveloped greenspace.

The site identified for this application, the BAC, is in the heart of the Allen Corridor and situated nearby schools, churches and several apartment buildings. This brownfield may be directly impacting public health through exposure of residents to contaminants sourced from this site.

The BAC is adjacent to an active Shell retail gasoline station (Bill's Shell Station). The gas station site is owned by PacWest Energy LLC (PacWest) and the business is operated by a Shell franchisee. The site consists of the station building and dispenser islands located east of the station building. The underground storage tanks (USTs) are located on the southern portion of the site.

The Shell site has a history of petroleum contamination dating back to 1994 when the first release of petroleum occurred. There have been two DEQ LUST files associated with this property; the first LUST (DEQLUST File No. 34-94-0030) closed in 2004 and the second LUST (DEQ LUST File No. 34-06-0149) has been open since 2006. In both cases, the contamination was attributed to petroleum spillage as the result of an overfill and missing spill bucket. All five USTs were installed in 1983 and have not been decommissioned or removed from the property.

A June 2012 report, titled *Offsite Groundwater and Soil Gas Monitoring Well Installation Report*, prepared by AECOM, entailed the installation of off-site groundwater monitoring wells on the BAC property. The report confirmed that the petroleum contamination from the Shell site migrated west to the BAC property. According to the ODEQ, Shell is liable for the contamination that has occurred on both sites and for any costs associated with the remediation work that is to be completed on both properties. Though the timeline for this project will not allow the additional delay, negotiations continue with PacWest and Shell for acquisition of the Shell site and remediation of the contamination. The City plans to proceed with redevelopment work in accordance with recommendations from ODEQ to make this public benefit a reality.

In order for the PSC project to move forward, the City must mitigate the impact of contamination at the site and set up engineered barriers to prevent construction activity from having a negative impact on the spread of hazardous substances and ensure the site is safe for the community and all occupants.

1.b. Welfare, Environmental, and Public Health Impacts

1.b.i. Welfare Impacts: The area around the BAC site is blighted, and contains some of our neediest and most vulnerable populations. The area has a high rate of minority populations that have lower incomes and are more likely to be renters than homeowners. These sensitive populations live in older, substandard housing and are at a higher risk of being impacted by brownfields. Because of the lack of access to reliable transportation, the residents of the lower income Target Area need jobs that are close to where they live, and desire a strong sense of place in the Allen Corridor, including added businesses, greenspace, and connectivity improvements between where they live, work, and play.

Pedestrian safety is compromised due to the long distance between crosswalks, segments with curb tight crosswalks and driving speed. The nearby intersection of Allen Blvd & Erickson Street has the 3rd highest auto crash rate in Washington County.

Beaverton also faces broad health disparities. Beaverton is one of a handful of cities in Oregon that has been designated by HHS as a Medically Underserved Area, which includes neighborhoods identified as having too few primary care providers, high infant mortality, high poverty, and a high elderly population. The Census tracts that define the Medically Underserved Area, which contain the brownfield site, have historically experienced some of the highest levels of criminal activity.

The median household income of the Target Area is \$48,893, compared to a median income of \$56,275 for the Portland Metro area. The Allen Corridor also has a high percentage at 51.66% of renter occupied households spending 30% or more of their income on rent. There is an urgency for affordable housing throughout the Portland metropolitan area. Shortage of affordable housing is estimated to be impacting close to 40% of the population in the region.

1.b.ii. Cumulative Environmental Issues: Downtown brownfields pose a number of risks to the community, and significantly overburden low-income residents in the target area. These sensitive populations live in older, substandard housing and their proximity to brownfields places them at a higher risk of being impacted. Nine initial sites, ranging from less than 0.5 acres to over 45 acres, have been identified for brownfields revitalization in Beaverton. These sites include a mix of previous industrial uses, including food processing, paper milling, rubber/silicone/plastic manufacturing, electronics manufacturing, window manufacturing, battery production, carpet recycling, auto sales, and gas stations. Phase I assessments already conducted on these sites have identified the following potential hazardous materials and petroleum contamination in the soil, groundwater and surface water identified in the table below:

Dichloroethane (DCA)	Dichloroethylene (DCE)	Trans-1,2-DCE	Methyl Ethyl Ketone (MEK)
Dichloromethane (DCM)	Polychlorinated Biphenyl (PCB)	Perchloroethylene (PERC)	Trichloroethylene (TCE)
Polycyclic Aromatic Hydrocarbons (PAH)	Cadmium	Chromium	Copper
Lead	Nickel	Zinc	Diesel Fuel and Other Petroleum Hydrocarbons

The existence of these contaminants at the 9 initial sites targeted for Phase II assessment pose significant health risks. Many of the hazardous substances identified have been designated by EPA as priority pollutants. As such, they are highly carcinogenic, mutagenic and teratogenic.

ODEQ monitors air quality pollutants, specifically fine particulate matter, also known as PM2.5 throughout the Portland Metro region². Recent data has shown high particulate levels at the DEQ air monitor located in nearby Hillsboro. While the region is not currently over the federal health standard for PM2.5, it is getting close and poor air quality could result in adverse health and economic impacts to the region and beyond. PM2.5 is a mixture of extremely small particles and liquid droplets found in the air. PM2.5 can be inhaled deep into the lungs and can lodge there for weeks and months, aggravating asthma, heart disease, and other respiratory and heart conditions. The primary source of PM2.5 is from woodstoves, although cars, backyard burning, industry, and commercial activities can also contribute to PM2.5 levels. More specific poor air quality in our Allen Corridor target area is documented by the US EPA's Environmental Justice Screen (EJScreen) Tool (see table below).

Environmental Indicators	State Percentile	EPA Region 10 Percentile	US Percentile
Air Particulates (PM 2.5 in ug/m3)	90	94	77
NATA Diesel Particulate Matter (ug/m3)	76	60-700th	70-80th
NATA Air Toxics Cancer Risk (risk per MM)	76	70-80th	70-80th
NATA Respiratory Hazard Index	72	80-90th	95-100th
Traffic Proximity and Volume	77	78	76

1 mile Ring Centered at 45.475536,-122.805951, OREGON, EPA Region 10

Data obtained using EJScreen (<http://www.epa.gov/ejscreen>) on 10/30/17.

1.b.iii. Cumulative Public Health Impacts: Communities with many brownfields tend to have a multitude of public health issues. Common public health issues include 1) increased potential for exposures to harmful chemicals sourced from brownfields, 2) increased crime rates associated with mental illness and substance abuse derived from feelings of hopelessness to which brownfields/blight are contributing factors, and 3) poor air quality resulting from climatic conditions and exacerbated by particulate material sourced from brownfields leading to elevated blood levels, asthma prevalence, etc.³

Beaverton is one of a handful of cities in Oregon that has been designated by HHS as a Medically Underserved Area, which includes neighborhoods identified as having high infant mortality, high poverty, and a high elderly population. Public health challenges disproportionately impact sensitive populations, including children, the elderly, and the poor. The brownfield in the

² <http://www.oregon.gov/deq/aq/Pages/AQ-Washington-County.aspx>

³ An Indicator Framework to Measure Effect of Brownfields Redevelopment on Public Health: ATSDR, July/August 2013

Target Area is a large part of this equation. For example, the BAC brownfield is situated between a nearby preschool/daycare center and a preschool - 8th grade private school. This brownfield may be directly impacting public health through exposure of residents to contaminants sourced from this site.

Washington County, where Beaverton is located, also suffers from other environmental and health issues. Twelve percent of Washington County's population is considered to be in poor or fair health, compared to 10% nationally. ODEQ monitors for certain air quality pollutants, specifically fine particulate matter, also known as PM2.5 throughout the Portland Metro region⁴. Recent monitoring data has shown high particulate levels at the ODEQ air monitor located in nearby Hillsboro. While the region is not currently over the federal health standard for PM2.5, it is getting close and poor air quality could result in adverse health and economic impacts to the region and beyond. Approximately 14% of Washington County's population does not carry health insurance.

1.c. Financial Need

1.c.i. Economic Conditions: The recently-passed Public Safety Center bond measure will not be sufficient to cover all costs of the development, and the City is limited in its ability to provide additional funding or mitigate the impact of contamination on this property without EPA's assistance.

Oregon's property tax structure caps tax payments and rate increases, eliminating the ability of local taxing authorities to perform periodic reassessments. As a result of this and other revenue shortfalls, Beaverton is less able to respond in a timely manner to many community concerns. Unemployment rates in the public and private sectors within the Target Area remain higher than in the state and nation. Unemployment in the area can largely be attributed to losses in the construction, manufacturing, retail, and tourism industries.

Beaverton's manufacturing sector has seen a steady decline. Approximately 26% of Beaverton's workforce was employed in manufacturing in 1980, compared to just over 10% in 2009. The recession further increased industrial and commercial vacancies. Vacancy rates for industrial and office space in Beaverton are above metro-wide averages. A critical first step in attracting business was Enterprise Zone designation for Beaverton's industrial core. Enterprise Zone designation enables the City to provide tax relief for up to 5 years to eligible businesses. However, while tax abatement provides an attractive incentive for businesses to locate and expand in Beaverton, the threat of environmental contamination on many prime sites poses an additional hurdle. In addition, Beaverton residents are impacted by the regional trend in the recovery of low-wage and high-wage jobs following the recession, but little return in middle-wage and family-wage employment. The PSC will create new workforce investment opportunities in this high unemployment target area.

1.c.ii. Economic Effects of Brownfields: The presence of the Shell gas station and adjacent contaminated sites, including the BAC, has had a significant impact on Beaverton in a number of ways which have drastically and negatively impacted the area. The Allen Corridor has a high number of code enforcement cases due to unkept property, graffiti, trash, and abandoned vehicles. The natural response to these issues was that area property owners deferred investments in their own properties and the neighborhood around it took on a run-down appearance. This pushed away new potential residents looking for well-kept housing opportunities. These conditions had a net negative impact for Beaverton because property values fell resulting in lower rents, and property investment stalled, resulting in reassessment and abatement requests and lower taxes collected.

⁴ <http://www.oregon.gov/deq/air/Pages/AQ-Washington-County.aspx>

The unrealized taxes from this trend has slowed the City's investments in transportation and other improvements in the area. The Allen Corridor has a concentration of small businesses, primarily minority-owned. We want to support and preserve the district's identity as welcoming and inclusive to all. Efforts are being made to mitigate displacement of existing businesses with public investments in storefront improvement grants, business incubators, and business mentorship programs. Mitigating the impact of contamination as part of the \$35 million construction of the PSC will help to kick start the revitalization effort of the area.

2. PROJECT DESCRIPTION AND FEASIBILITY OF SUCCESS

2.a. Project Description

2.a.i. Existing Conditions: The PSC will be built at the existing site of the BAC, which is a city-owned property at the corner of SW Hall Blvd and SW Allen Blvd which offers two meeting rooms for public use Monday through Friday. Contamination from the adjacent Shell gas station has reached the groundwater and has migrated west to the BAC. The BAC is confirmed to have petroleum contamination at the groundwater level on site. There are also vapor concerns at the site. Shell (one of the partners in the PacWest joint venture) has hired AECOM to be their consultant for monitoring both sites' contamination and to craft a mitigation strategy.

The migration of contamination from the Shell site to the BAC site will affect any redevelopment effort that is planned on the City's property. While the groundwater contamination only exceed risk-based concentrations (RBC) for excavation and construction workers, the continued risk of vapor intrusion into the building will require active or passive engineered barriers to be included in redevelopment.

The outcomes of the construction plan are to facilitate significant re-investment in the nearby area with the Allen Corridor revitalization. This includes enhancing pedestrian and bicycle paths for improved safety, traffic calming, and greenspace.

2.a.ii. Proposed Cleanup Plan: This project will be consistent with the Analysis of Brownfields Cleanup Alternatives (ABCA) and consist of the excavation and proper disposal of petroleum contaminated soils that are required to be removed as part of the installation of new utilities and building foundations. The remaining residual contaminated soil will be encapsulated by the installation of an engineered barrier consisting of a mix of a soil, pavement, and concrete cover systems. Each activity will feature standard construction techniques and can be implemented in a relatively short timeframe.

During construction, engineering controls will be utilized including dust suppression during excavation activities and the use of temporary fencing to protect the public during construction activities. Once the project is completed, institutional controls will be placed through the use of Oregon's Uniform Environmental Covenant Act. A deed restriction will be implemented to prohibit the disturbance of the soil cover, the excavation of contaminated soil, and the extraction of groundwater from the Site. These restrictions will be documented through the ODEQ Voluntary Cleanup Program, the state's voluntary cleanup program.

2.a.iii. Alignment with Revitalization Plans: Adopted in 2010 and updated in 2016, the Beaverton *Community Vision* is the product of the most extensive public engagement process ever undertaken in the city. A key priority of the *Community Vision* was the development of strategies that clarify Beaverton's role in an evolving economy, and take steps to create the infrastructure, workforce training and recruitment approaches necessary for success. In 2011, Beaverton adopted its *Civic Plan*, which operationalizes the *Community Vision* and establishes clear actions to realize the City's goals. The revitalization of downtown Beaverton and the rebirth of advanced manufacturing are core components of that plan. Most relevant to the Allen Corridor is the community's

commitment to redevelop blighted properties to create more vibrant neighborhoods (Goal 67 in Beaverton's Community Vision Plan).

Receiving an EPA Brownfield Assessment grant in 2013 was a critical milestone for the City. Beaverton identified 9 initial properties where Phase I assessments had been conducted. These sites, located on or near light rail lines, represent prime redevelopment opportunities, and can help the City attract businesses that build upon its strengths in software development, scientific and medical device manufacturing, electronics manufacturing, and food processing. Beaverton has been and is still working with neighborhood associations, non-profit groups, businesses, and other stakeholders to target its EPA Brownfields funding to the assessment of properties that will provide the greatest benefits to disadvantaged communities. Evaluation criteria that was used to select appropriate properties for assessment resources included: removal of health hazards; ability to create quality jobs for neighborhood residents; capacity to build upon Beaverton's economic strengths, particularly advanced manufacturing; and potential to leverage other federal and state revitalization resources.

Beaverton is working with businesses to locate and expand existing uses on brownfields, including companies in the software development, scientific and medical device manufacturing, electronics manufacturing, and food processing sectors. Brownfield revitalization supported by the EPA Brownfields Assessment Program have made these sites more attractive for development, boosted economic development potential, increased property values and tax revenues, and protected public health and the environment. EPA Cleanup support will build on Beaverton's sustainability strengths, including completed programs such as a HUD Sustainable Communities Challenge Grant to revitalize the Creekside District and Round redevelopment areas, as well as a CDC Community Transformation Grant for a new community health clinic in the Round redevelopment area to improve medical access for low-income populations.

The PSC is one of the first properties ready for redevelopment. The current police facility is inadequate for the needs of police and emergency management personnel. As a converted office space, the police facility was not designed with the security features required for public-safety buildings including continuous operations in emergencies, as it sits below the floodplain and is not designed for earthquake resiliency.

Passed by Beaverton voters in 2016, the \$35 million bond to construct an approximately 90,000 square-foot PSC will position public safety resources in the middle of three service districts for enhanced response. However, the bond measure will not cover all of the costs to mitigate the impact of contamination from the Shell site.

With EPA funding, the new PSC building will be more flexible for future growth of the workforce and welcoming and safe for the community than current facilities. Construction of the PSC will utilize existing road, water and sewer infrastructure. The City sees the PSC as an anchor to future development in the area, bringing more than 200 employees per day to the area. This will spur new restaurants and shops to open up in the Target Area and encourage existing businesses to reinvest in their facilities and locations.

2.b. Task Descriptions and Budget Table

2.b.i. Task Descriptions: The scope of work for the project has been organized into four tasks.

Task I - Cooperative Agreement Oversight / Engineering:

This task includes costs for the planning, engineering, design, bidding, and oversight of cleanup activities as well as programmatic management of the grant and attendance at the EPA National Brownfields Conference. This budget is further broken down as follows:

1. \$1,000 for programmatic management of the grant including quarterly reports, and ACRES updates (14 hours at \$70 per hour staff)
2. \$1,000 for staff travel to the EPA Brownfields Conference
3. \$15,000 for planning, engineering, design, and bidding (150 hours at \$100 per hour QEP)
4. \$15,000 for on-site oversight and documentation (150 hours at \$100 per hour QEP)

Beaverton will provide grant management oversight and contractor coordination as an in-kind service at an estimated amount of \$7,000 (100 hours at \$70 per hour). Outputs for this include EPA Quarterly reports, quarterly ACRES updates, engineering bidding documents, and cleanup oversight field reports.

Task II - Public Meetings and Community Involvement:

This task includes development of a Community Relations Plan and finalizing the ABCA / Remedial Action Plan (RAP), submitting the quality assurance project plan (QAPP), and submitting a VRAP application and work plan. In addition, this task involves the public involvement activities described in **Section 3.a**. This task estimates the following:

1. \$3,000 for Beaverton staff to prepare the Community Relations Plan, advertise and attend public meetings (42.5 hours at \$70 per hour)
2. \$9,000 for consultant time to finalize the ABCA/RAP and review the Community Relations Plan, prepare the QAPP and update VRAP documents, assist in the community outreach portion, and participate at the public meetings (90 hours at \$100/hour)
3. \$1,000 in supplies that will comprise newspaper advertising and presentation materials.

The City will provide support for the Community Relations Plan and community outreach support outside of the public meetings through the Public Information Office as an in-kind service at an estimated amount of \$3,500 (50 hours at \$70 per hour). Outputs for this task include the Community Relations Plan, ABCA/RAP, updated VRAP No Action Assurance Letter, handouts during public meetings, and meeting minutes.

Task III - Cleanup Activities:

This task includes contractor costs for soil removal and capping of remaining residual contaminated soil at the site and the budget is based on the estimates produced in the development of the ABCA. This budget allocates all costs to contractual items to complete grant activities at the Site and is further broken down as follows:

1. Approximately \$30,000 to remove and dispose of contaminated soils
2. Approximately \$120,000 to install engineered soil, concrete and asphalt cover system.

Outputs for this task will include engineering oversight field reports that will be submitted to ODEQ for approval, and bills of lading and/or waste manifests.

Task IV - Coordination and Final Reporting:

Upon grant award, the Beaverton project team will develop a detailed work plan with clear milestones, including performance measures to track outputs and outcomes. Expected outputs of the project will include: site contaminate mitigation plan (including measures for during construction and the final mitigation plan), community involvement plan and implementation strategy, final ABCA documents, administrative records, and completion report in collaboration with ODEQ.

The project team will also measure the following outcomes: number of jobs created; dollars leveraged; tax incentives utilized; acres redeveloped; health impacts avoided; increased accessibility; reduced transportation costs for low-income residents; green infrastructure created; and materials recycled.

A simple-to-read matrix will be developed that presents all project outputs and outcomes. Beaverton will work with businesses and the community at-large to collect relevant data through surveys, interviews, face-to-face meetings, and other research. The designated project manager will provide monthly reports to the Director of Community and Economic Development on project progress, as well as quarterly reports to EPA. Beaverton will also use the ACRES tool to report project progress, and promote the results publicly.

This task includes consultant costs for ongoing coordination with the EPA Brownfields Program and the ODEQ. Subtasks will include communications, submission of status reports, and a summary report. This task estimates \$5,000 for consultant time for preparing the summary report (50 hours at \$100 per hour). Beaverton will provide coordination and communications with the EPA and ODEQ as an in-kind service at an estimated amount of \$3,500 (50 hours at \$70 per hour). Outputs include the summary report as well as a Certificate of Completion from the ODEQ.

2.b.ii. Budget Table

Budget Categories	Task 1 - Cooperative Agreement Oversight / Engineering	Task 2 - Public Meetings and Community Involvement	Task 3 - Cleanup Activities	Task 4 - Coordination and Final Reporting	Totals
Personnel	\$1,000	\$3,000	\$0	\$0	\$4,000
Fringe Benefits	\$0	\$0	\$0	\$0	\$0
Travel	\$1,000	\$0	\$0	\$0	\$1,000
Equipment	\$0	\$0	\$0	\$0	\$0
Supplies	\$0	\$1,000	\$0	\$0	\$1,000
Contractual	\$30,000	\$9,000	\$150,000	\$5,000	\$194,000
Total Federal Funding	\$32,000	\$13,000	\$150,000	\$5,000	\$200,000
Cost Share	\$7,000	\$3,500	\$26,000	\$3,500	\$40,000
Total Budget	\$39,000	\$16,500	\$176,000	\$8,500	\$240,000

Note: Task 2 Public Meetings and Community Involvement will be conducted by City Public Information Program staff. Allen Corridor planning activities to improve the district will include grant activity at the Public Safety Facility site.

2.c. Ability to Leverage: In 2016, Beaverton voters approved a \$35 million bond to construct the 90,000 square foot public safety center, creating an incredible resource to leverage with an EPA Brownfields Cleanup grant. The grant will also leverage several existing sources of federal, state, local and private sector funding, as well as help the City attract future investment into its downtown revitalization activities. Resources that EPA funding will leverage include:

Funds to Leverage/Source	How Funding Will Be Used	Amount (\$)	Status
City of Beaverton PSC Bond	Design, planning and construction of the Public Safety Center	\$35,000,000	Secured Resource
Business Oregon Brownfields Redevelopment Program	Applying for assistance in funding the removal and proper disposal of petroleum contamination and installation of an engineered barrier	\$60,000 grant or greater for revolving loan fund resources	Pending Resource
Targeted Brownfields Assessments	Continue to work with EPA Region 10 to pursue additional resources and support for brownfields assessments.	To be determined	Potential Resource

3. COMMUNITY ENGAGEMENT AND PARTNERSHIPS

3.a. Engaging the Community: Beaverton has a long history of engaging a broad range of community stakeholders, including neighborhood groups, business leaders, financial institutions, government agencies, and non-profit organizations, in its community decision making. For example, Beaverton gathered significant public input before it adopted its *Civic Plan*, which operationalizes the *Community Vision* and establishes clear actions to realize the City's revitalization goals. In the preparation of its Community Vision, Beaverton gathered feedback and input from more than 5,000 citizens through events, surveys, forums and other venues. The City is working with 60 community organizations to implement more than 100 community priorities in the plan, and plans to continue the following activities to involve the affected community in the PSC development:

- City staff meet monthly with members of the Vose Neighborhood Association Committee (NAC), Denney Whitford/Raleigh West NAC and Central Beaverton NAC to discuss ideas to improve these neighborhoods, including the PSC.
- Beaverton works with area businesses to explore opportunities to cleanup brownfields, expand facilities, and grow jobs in the community. Based on the responses from businesses, the Economic Development Division may offer financial support to develop a business association to represent the interests of Allen Corridor businesses.
- Beaverton recently expanded its Cultural Inclusion program to enhance current outreach programming like Welcoming Week, BOLD program, and coordinating the volunteer led Diversity Advisory Board to strengthen relations with ethnic communities.
- The City will continue to engage residents, businesses and other stakeholders to discuss brownfields revitalization opportunities, continuing work begun through the 2013 EPA Brownfield Assessment Grant. Beaverton connects with the community through public meetings, neighborhood association gatherings, church groups, speaker's bureaus, newsletter mailings, web sites, social media, and other communication vehicles, and EPA funds were used to produce brownfields educational information for residents, community groups, property owners, and businesses.
- The Allen Boulevard District Plan will engage residents and businesses throughout the target area to learn the priorities the community has for this area, with a particular goal of working with the area's vulnerable diverse and low-income residents. It will incorporate community residents and organizations to further develop actions the City and its partners can take to meet those community goals.

Throughout the project period, Beaverton's Public Information Office will coordinate with the community through public meetings, neighborhood association gatherings, church groups, speaker's bureaus, newsletter mailings, web sites, social media, and other communication vehicles. All written outreach materials will be made available in English, Spanish, Chinese, Japanese, Korean, Somali, Russian and Arabic.

A multimedia approach is being employed to advertise meetings, communicate project progress, encourage community participation, and respond to community concerns, including announcements via local newspaper, e-mail and Beaverton's website. In addition, Beaverton uses Facebook and Twitter disseminate instant news about the project including meeting dates and times. All public forums/meetings will be held in the Beaverton City Hall and be held at a time where the working public will have opportunity to participate. The meetings will be recorded and aired on Beaverton's public access television channel and rebroadcast online so that the public which cannot attend may be kept informed of the progress of the grant and activities at the site.

Any requests made by community members for other means of engagement will be implemented if possible.

This comprehensive, diligent approach to community engagement and information dissemination are intended to ensure the process is accessible by the diverse, sensitive populations in and around the Target Area.

3.b. Partnerships with Government Agencies: Beaverton is coordinating with ODEQ to identify appropriate sites for brownfield cleanup, and data from their monitoring wells have been invaluable in assessing the extent and degree of contamination on the site. Beaverton will work with ODEQ to ensure grant funded activities meet applicable standards and is protective of human health and the environment. In addition, the City has begun conversations with Business Oregon, the state's economic development agency, to explore opportunities to tap into two additional sources of brownfields funding: the Oregon Brownfields Redevelopment Fund and the Oregon Coalition Brownfields Cleanup Fund.

Beaverton is working with the Washington County Health Department and the Oregon Health Authority to improve health disparities in low-income neighborhoods and to promote community health during our brownfield project. Representatives from the Washington County Health Department and Oregon Health Authority will be invited to participate in the project.

The City has engaged Portland Community College to explore opportunities to train area residents for environmental careers that could help them assess and cleanup brownfields in their neighborhoods, and the City will encourage its contractors and developers to recruit and hire low-income residents who can gain valuable skills training through these partnerships.

3.c. Partnerships with Community Organizations:

3.c.i. Community Organization Descriptions & Roles: Beaverton is actively engaging and coordinating with the following community-based organization on the project:

- *Public Safety Center Advisory Committee:* In March of 2011, Mayor Denny Doyle commissioned a committee of community members to study the public safety facility needs for the City. This was based in part on the results of a space needs study conducted by group Mackenzie, a Portland based architectural firm with vast experience in public safety facilities. The Public Safety Center Advisory Committee (PSCAC) was formed and was given direction to review and validate, if appropriate, the Group Mackenzie study, consider options for potential sites, make recommendations on funding options, and consider the needs for police and municipal courts. Jim McCreight was elected chairman of PSCAC.
- *Beaverton Area Chamber of Commerce:* The Beaverton Area Chamber of Commerce lead by CEO/President Lorraine Clarno, works to strengthen the local economy, promote the community, represent and support business, and provide networking and referrals. The Chamber promotes a vibrant community and business environment by leading business development and retention, advocating sound public policy, and providing strategic member services. The Chamber represents over 6,000 businesses with 85,000 jobs in the area. The Chamber was represented on the PSCAC.
- *Highland Neighborhood Association Committee:* The Highland Neighborhood Association Committee represents the general location in which the Public Safety Center will be constructed. Anyone that lives, owns property including businesses, or represents a nonprofit organization within the neighborhood boundaries is a member. Members meet monthly to discuss ideas and issues and work on projects to enhance the livability of the neighborhood. Members of the Highland Neighborhood Association Committee and

area residents will be engaged to conduct outreach and gather input within their communities and share ideas as the planning phase continues.

3.c.ii. Letters of Commitment: The City has received three letters of support from stakeholders and community organizations that have been included in Attachment C.

3.d. Partnerships with Workforce Development Programs: Workforce development organizations such as WorkSource Oregon, Worksystems, Inc., Adelante Mujeres, the Beaverton Hispanic Center, Micro Enterprise Services of Oregon, and Portland YouthBuilders will work with the City to ensure that employers hire people of color and people with disabilities from the surrounding neighborhoods for grant activities and construction of the PSC. Educational institutions such as Portland Community College will help the City explore opportunities to provide environmental job training to neighborhoods impacted by brownfields.

4. PROJECT BENEFITS

4.a. Welfare, Environmental, and Public Health Benefits: The Target Area welfare challenges include blight, lack of affordable housing and public safety concerns. These issues are disproportionately impacting sensitive and minority populations in and around the Allen Corridor. Future site occupants and adjacent residents will realize health benefits from reduced/eliminated toxicity associated with the reduction of contaminants from water, soil and air. The redevelopment of the BCA site will serve as a catalyst for investment in other blighted buildings and substandard housing nearby, attracting new businesses leading to better housing and family wage jobs which will positively impact public health by improving mental health and increasing household incomes. It will create significant welfare and economic benefits besides the obvious removal of blight.

While our revitalization effort will most benefit the underserved and sensitive populations, all of Allen Corridor and Beaverton will benefit in a number of ways. Specific expected benefits include:

- Enabling Beaverton to mitigate the impact of contamination from the Shell site and redevelop a community asset in the heart of the Allen Corridor, improving a distressed neighborhood and increasing community pride.
- Reducing the risk of petroleum contamination to the local water supply.
- Creating an opportunity to improve the transportation facilities in the area by adding turn lanes for vehicles and a dedicated bicycle lane.
- New construction jobs for the PSC will reduce combined housing and transportation costs for some of Beaverton's lowest-income residents.
- Creating a desperately-needed public safety facility that can effectively serve safety needs. As our population moves closer to 100,000, Beaverton has outgrown the existing police facility.
- Benefitting Beaverton's Medically Underserved Area by reducing brownfields impacts on public health.
- New job training and community capacity building opportunities through coordination with Portland Community College, WorkSource Oregon, Beaverton School District, Adelante Mujeres, Microenterprise Services of Oregon, Beaverton Hispanic Center, BESThq, Portland YouthBuilders, and local employers.
- Creating an advocacy committee to establish a process for training and hiring disadvantaged members of the community.
- Increased engagement with community organizations representing the Vose, Denney Whitford/Raleigh West and Central Beaverton neighborhoods to improve social, economic and environmental opportunities and ensure that brownfield redevelopment provides

increased employment opportunities for local community members and does not displace long-time residents in these neighborhoods.

4.b. Economic and Community Benefits: The primary economic benefits from brownfield redevelopment are 1) added employment, both short term construction employment and long term employment associated with new industry, and 2) increases in tax revenue from both new jobs (income tax) and new development (property tax). EPA estimates that 8.5 jobs are created per \$100,000 in EPA Brownfield funds expended⁵. Thus, with a total of \$400,000 in EPA grants, this project will create 34 jobs in the Target Area. Assuming an income of \$40,000/job, and with Oregon's income tax rate of 9%, these jobs would generate \$122,400 in state/local income taxes annually. Creating jobs near Beaverton's lowest-income residents will reduce combined housing and transportation costs, and revitalizing this property will improve health and safety for nearby residents.

The PSC will improve the safety and stability of the target area, and increase visits to local businesses from police and city staff. On the corner of two high traffic routes, the development will become an anchor around which property owners and businesses can rally to revitalize their community. By creating a more attractive area for new industry and entrepreneurial ventures, brownfield redevelopment aligns with Beaverton's *Community Vision* to redevelop blighted properties to create more vibrant neighborhoods and reduce commercial vacancy rates in the Allen Corridor. Redevelopment will generate new tax revenue, allowing the City and its partners to better support community programs and social services.

5. PROGRAMMATIC CAPABILITY AND PAST PERFORMANCE

5.a. Audit Findings: Beaverton has an exemplary record of managing federal grants, having received numerous EPA, HUD, CDC, DOT, and other federal grants over the years. Beaverton has never been cited for any adverse audit findings from an OMB Circular A-133 audit or any other audit. The City has also never been required to comply with special "high risk" terms or conditions under OMB Circular A-102.

5.b. Programmatic Capability: The City has the staff and expertise necessary to manage the EPA Assessment project. Captain Eric Oathes of the Beaverton Police Department has been with the department in a number of leadership roles for more than 17 years, including the Community Policing Division. Currently, he is the project manager leading the planning and development of the PSC. This work is supported by Francesca Gambetti, a partner at Shiels Oblatz Johnsen, Inc., the Owner's Representative for the PSC. She brings nearly 20 years of experience in all aspects of project development, including conducting feasibility analyses, negotiating contracts, managing environmental issues, structuring and obtaining project funding, and managing design and construction. Captain Oathes will lead the project teams and ensure that all grant requirements are followed.

Community engagement for this project will be conducted by the City's Public Information Office (PIO). PIO will integrate the grant project into planned public engagement activities, including regular meetings with neighborhood associations and the Allen Boulevard Redistricting Plan, as an extension of the existing robust PSC public engagement strategy.

Captain Oathes will be supported by Cheryl Twete, the City's Community Development Director, who will ensure that staff and resources are adequate to successfully complete the project. She has more than 30 years of professional public development expertise, and will coordinate staff working on the project, including:

⁵ <http://www2.epa.gov/brownfields/brownfields-program-accomplishments-and-benefits>

- David Tetrick, Economic Development Project Coordinator, manages Beaverton's current EPA Brownfields Assessment Grant and has assisted in the development of the PSC project.
- Floyd Harrington, City Engineer, manages the Public Works Engineering Division, which is comprised of the traffic, utilities (water, sewer and storm) and survey groups. Engineering also administers the City's capital improvements program. The utility engineering group provides utility master planning, and the design and project management for capital improvement projects. The land surveying group provides surveys for engineering design and legal descriptions for acquisition and conveyance of City properties, rights-of-way and utility easements.
- Patrick O'Claire is the City's Finance Director, and oversees financial reporting and federal grant compliance under the Single Audit Act and OMB Circular A-133.
- Bill Kirby serves as Beaverton's City Attorney. His legal experience focuses on public contracts, real estate transactions, litigation, and compliance with open records and meetings laws.

In the case where additional expertise is required, the City utilizes a competitive procurement process for obtaining this expertise. This consists of establishing a proposal review committee, receiving proposals from multiple firms, evaluating the firms based on established criteria, and awarding the contract to the firm that best meets those criteria.

5.c. Measuring Environmental Results: Anticipated Outputs and Outcomes: Beaverton has a long track record of successfully managing community projects. A detailed work plan with clear milestones and responsibilities will be developed at an initial meeting, including participation from Mayor Denny Doyle, the City's Community Development Director, the Economic Development Manager, the Economic Development Project Coordinator, the Sustainability Director, and other key City staff. Gil Wilstar, ODEQ's Brownfields Coordinator, and Rebecca Wells-Albers, ODEQ's Northwest Brownfields Coordinator, will also be invited to participate. The meeting will identify project goals and strategies, and responsibilities within the work plan will be well-defined and delineated. Performance measures will be established in order to track progress.

To ensure that the project is on schedule, status updates on project progress will be incorporated into the City's existing monthly reporting structure. In addition, Beaverton staff will meet regularly with key partners, including representatives from the three neighborhood associations, the Allen Corridor business community, and other stakeholders, to discuss progress on project goals. Other public meetings will be set as needed to address any concerns from particular construction activities that could impact the surrounding community.

5.d. Past Performance and Accomplishments

5.d.i.1. Accomplishments: The City was awarded a Community-Wide Assessment grant in 2012. Six Phase I ESAs and four Phase II ESAs were completed, or are currently in the process of being completed, in the targeted area. In addition, the city convened a group of community stakeholders to develop and oversee the implementation of a Public Involvement Plan (PIP). The PIP outlined goals and objectives for outreach, and helped the City commit to a proactive approach to engaging with the target area community. Two large public meetings were held: one to educate community members about brownfields generally and another targeted specifically to Beaverton property and business owners that might seek to utilize the brownfield assessment program. The public involvement program also included educational materials developed for broad distribution and translated into multiple languages. In addition to the assessments and public involvement accomplishments outlined above, the City was able to negotiate two Community Benefit

Agreements with one of the parties receiving assessment assistance. At this time, the Assessment, Cleanup and Redevelopment Exchange System (ACRES) still needs to be updated with additional relevant information. The grant program is concluding its term on December 31, 2017, with an ABCA in support of an EPA Cleanup Grant for a high-profile property that will house a new police station and community service center.

5.d.i.2. Compliance with Grant Requirements: The City of Beaverton received the EPA Brownfields Assessment Grant award on August 21, 2013. The work plan focused on completing assessments in targeted employment districts within the central city. As such, assessment work completed through the grant has focused on high-priority redevelopment opportunities that helped advance City objectives of addressing contamination, generating economic development, and providing community benefit. In general, the City's brownfield program complied with the work plan and we have a history of timely quarterly reporting on grant deliverables. The main exceptions being that more grant resources were dedicated to Phase II assessments, and that there was less interest in Phase I assessments than anticipated. Due to staffing changes and delays in targeted projects, the City requested and received a one-year extension to the grant program, continuing work until December 31, 2017. There is currently one Phase I assessment underway on a property affected by hazardous materials contamination and two Phase I and Phase II assessments underway on properties affected by petroleum contamination from a nearby gas station. These assessments, in addition to the current activities in support of the ABCA and this grant application, will complete the grant period with all funds expired.

ATTACHMENT A
THRESHOLD DOCUMENTATION

ATTACHMENT A – THRESHOLD DOCUMENTATION

1. Applicant Eligibility

The City of Beaverton is a city in Washington County in the state of Oregon. The City has a municipal charter, and was incorporated within the State of Oregon in 1893.

2. Site Ownership

The City of Beaverton owns the Beaverton Activities Center (BAC) site. The property was purchased from Albertson's, Inc. on July 1, 1984. The City of Beaverton has sole ownership as indicated by the fee simple title recorded deed.

3. Basic Site Information

- a. Name: Beaverton Activities Center – Tax Lot ID 1S121AA01700 and Tax Lot ID 1S121AA01800
- b. Address: 12500 SW Allen Blvd, Beaverton, OR 97005
- c. Owner: City of Beaverton, Oregon
- d. The City is the current owner.

4. Status and History of Contamination at the Site

- a. The site is contaminated by petroleum.
- b. The Beaverton Activities Center was originally constructed as an Albertson's grocery store by at least 1964. The building has since undergone two major renovations: one in 1983 when it was converted to the Beaverton Library and a second renovation in 2001 when it was converted to the current Beaverton Activities Center. During the 2001 renovation, the building was reportedly stripped to the shell and remodeled to its current configuration.
- c. The project site includes an approximately 24,000-square-foot Beaverton Activities Center owned and operated by the City, which is adjacent to an active Shell station. Beaverton Activity Center is used as a volunteer based community hub for arts, culture, literacy, and healthy lifestyle programs. The facility will be closed as of January 1. The City has already started assisting tenants in relocating to nearby facilities. The community and neighborhood association has hosted community events publicizing the proposed Public Safety Center. When completed the PSC will house approximately 300 police officers and emergency management officials.
- d. The site became contaminated because of a diesel release to soil and groundwater detected in January 2006. The source of the release was unknown, and DEQ assigned the site LUST File No. 34-06-0149.

5. Brownfields Site Definition

Review of available records pertaining to the site reveals the following about the BAC site:

- a. The BAC site is not listed (or proposed for listing) on the National Priorities List (NPL).
- b. The site is not currently subject to any unilateral administrative orders, court orders, administrative orders on consent, or judicial consent decrees issued to or entered into by parties under CERCLA.
- c. The site is not subject to the jurisdiction, custody, or control of the U.S. government.

6. Environmental Assessment Required for Cleanup Proposals

A diesel release to soil and groundwater was discovered at the adjacent Shell station in January 2006. The source of the release was unknown, and DEQ assigned the site LUST File No. 34-06-

0149. A Phase II Environmental Site Assessment was performed at the Shell station in August 2007 and included advancing multiple borings for the collection of soil and groundwater samples. Petroleum constituents were detected in soil and groundwater at concentrations exceeding the most stringent RBCs north and west of the service station building, north of the dispenser islands, and south of the underground storage tank basin.

On the basis of these findings, multiple investigations were performed by others to evaluate the magnitude and extent of impacts to soil, groundwater, and soil gas, including beyond the boundaries of the Shell station property. The investigations included installing 14 monitoring wells and 5 permanent soil gas wells, conducting quarterly groundwater and soil gas monitoring to the present day, and preparing a Conceptual Site Model and Phase II Site Assessment (CSM) for the Shell station release on the BAC property. A further Soil Gas Assessment on the Beaverton Activities Center property (target site) was concluded by GeoDesign on August 11, 2017. The primary compounds of potential concern (COPCs) at the project site include gasoline-range organics, diesel-range organics, residual-range organics (oil), and their associated constituents in soil, groundwater, and soil gas.

On the basis of our review, soil at the project site primarily consists of silty clay or brown, silty sand over high plasticity clay and brown silt to a depth of 20 feet below ground surface (BGS). Groundwater is present at the project site at depths ranging between 5 and 12 feet BGS and has been calculated to flow to the northwest. Therefore, the current Beaverton Activities Center south of the Shell station is considered to be in a hydraulic up-gradient position relative to the Shell station

7. Enforcement or Other Actions

Adjacent property (shell station) reported petroleum release to Oregon Department of Environmental Quality (“ODEQ”) in 2006. The shell station is being investigated by Equilon Enterprises LLC, dba Shell Oil Products US under a cost recovery agreement with ODEQ under Leaking Underground Storage Tank file number 34-06-0149. Applicant is not a responsible party for contamination on its site.

8. Sites Requiring a Property-Specific Determination

Based on our review of the property-specific determination criteria, the City of Beaverton has determined that this site is not subject to this determination review process for the following reasons:

- There are no planned or ongoing removal actions under CERCLA;
- The site has not been issued or entered into a unilateral administrative order, a court order, an administrative order on consent, or judicial consent decree or to which a permit has been issued by the United States or an authorized state under the Resource Conservation and Recovery Act (RCRA), the Federal Water Pollution Control Act (FWPCA), the Toxic Substances Control Act (TSCA), or the Safe Drinking Water Act (SDWA);
- The site is not subject to RCRA to which a corrective action permit or order has been issued or modified to require the implementation or corrective measures;
- The site is not a land disposal unit that has submitted a RCRA closure notification or is subject to closure requirements specified in a closure plan or permit;
- There has been no document release of PCBs requiring that the property is subject to TSCA remediation; and
- The site is not receiving monies for cleanup from the LUST Trust Fund.

9. Site Eligibility and Property Ownership Eligibility

- a. The City of Beaverton is not requesting funding for the cleanup of hazardous substances at this time.
- b. Property Ownership Eligibility – Petroleum Sites
 - (1) Information Required for a Petroleum Site Eligibility Determination
 - a. Current and Immediate Past Owners: Current owner is City of Beaverton, and immediate past owner was Albertson's, Inc.
 - b. Acquisition of Site: Site was first brought to the City via right of way dedication on March 9, 1979 and was later purchased by the City on July 1, 1984.
 - c. No Responsible Party for the Site: The current and immediate past owner has not (i) dispensed or disposed of petroleum or petroleum product contamination, or exacerbated the existing petroleum contamination at the site; (ii) owned the site when any dispensing or disposal of petroleum (by others) took place; and (iii) took reasonable steps with regard to the contamination at the site.
 - d. Cleaned Up by a Person Not Potentially Liable: The City of Beaverton has not dispensed or disposed of petroleum or petroleum product, or exacerbated the existing petroleum contamination at the site.
 - e. Relatively Low Risk: The property represents a relatively low risk. The property is not receiving or using LUST Trust Fund monies and is not subject to a response under the Oil Pollution Act (OPA).
 - f. Judgements, Orders, or Third Party Suits: Adjacent property (shell station) reported petroleum release to Oregon Department of Environmental Quality ("ODEQ") in 2006. The shell station is being investigated by Equilon Enterprises LLC, dba Shell Oil Products US under a cost recovery agreement with ODEQ under Leaking Underground Storage Tank file number 34-06-0149. Applicant is not a responsible party for contamination on its site.
 - g. Subject to RCRA: No, the site is not subject to any order under section 9003(h) of the Solid Waste Disposal Act.]
 - h. Financial Viability of Responsible Parties: [No current or immediate past owners are identified as responsible for the contamination at the site.

10. Cleanup Authority and Oversight Structure

- a. Cleanup Oversight:

The City of Beaverton will work in cooperation with Oregon DEQ and enroll in a state-approved response plan. Beaverton will hire a qualified environmental professional (QEP) prior to implementing mitigation activities at the site. The consultant will obtain and evaluate contractor bids, coordinate and oversee mitigation activities. The City's competitive procurement procedures will be consistent with 2 CFR 200.317 through 200.326.
- b. Adjacent Property Access: The City of Beaverton owns the adjacent properties and will have full access to the site.

11. Community Notification

The City of Beaverton conducted a public meeting on Wednesday, November 7, 2017 at 6:30 PM to gather comments on the draft Brownfields Cleanup Grant application being submitted to the federal EPA and the draft Analysis of Brownfields Cleanup Alternatives (ABCA) for the mitigation of the Beaverton Activities Center site. The meeting was held at the Beaverton Building as part of a regularly scheduled City Council meeting. Approximately 40 people from the public attended. We did not receive public comment or feedback from council, but we did receive public comment during the visitor's comment period after the staff summary presentation of the project. The only public comment was received from both the Highland Neighborhood Association Committee and the Vose Neighborhood Association Committee and were in support of the Brownfields mitigation and the grant opportunity. The required documentation including a copy of the meeting advertisement, a notice of public hearing, and meeting minutes (including summary of comments received for the public meeting) are included in Attachment E. A copy of the draft Analysis of Brownfields Cleanup Alternatives is included as Attachment F.

12. Statutory Cost Share

- a. As required, the City of Beaverton will provide \$40,000 in the form of in-kind services made up of staff time, as well as any labor or equipment needed, to meet the 20% cost share.
- b. The City of Beaverton is not requesting a hardship waiver of the cost share.

ATTACHMENT B
LETTERS FROM THE STATE AUTHORITY



Oregon

Kate Brown, Governor

Department of Environmental Quality
Northwest Region
700 NE Multnomah Street, Suite 600
Portland, OR 97232
(503) 229-5263
FAX (503) 229-6945
TTY 711

November 15, 2017

via electronic delivery

Margaret Olson
Brownfields Project Officer
Office of Environmental Cleanup
US Environmental Protection Agency R/10
805 SW Broadway, Suite 500
Portland, OR 97205

**Re: Allen Boulevard Site
Petroleum Determination
12500 SW Allen Boulevard
Washington County
Tax Lots: 1S121AA00200, 1S121AA01700, 1S121AA01800
Beaverton, OR 97005**

Dear Margaret:

The Oregon Department of Environmental Quality (ODEQ) has reviewed information for the Allen Boulevard property in Beaverton, Oregon. The property is located at 12500 SW Allen Boulevard in Beaverton, and is associated with tax lots 1S121AA00200, 1S121AA01700, and 1S121AA01800 in Washington County.

The review was performed to determine if the site would be eligible to receive funding from the City of Beaverton's Brownfield Cleanup Grant which, if awarded, would be funded by the U.S. Environmental Protection Agency (EPA). Based on the review of available information, ODEQ has determined that the site meets the four eligibility criteria and is eligible to receive funding.

In order to determine the site's eligibility, ODEQ used the criteria in Appendix 1 Section 1.3.2 of the EPA's "*FY18 Guidelines for Brownfields Cleanup Grants*" as a guide.

Appendix 1 Section 1.3.2 *Contamination by Petroleum or Petroleum Product* states:

"For a petroleum contaminated site(s) that otherwise meets the definition of a brownfield site to be eligible for funding, EPA or the state must determine:

1. the site is of "relatively low risk" compared with other "petroleum-only" sites in the state; and
2. there is no viable responsible party; and
3. the site will not be assessed, investigated or cleaned up by a person that is potentially liable for cleaning up the site.
4. petroleum-contaminated sites must not be subject to a corrective action order under the Resource Conservation and Recovery Act (RCRA) §9003(h)."

“Relatively Low Risk”

Appendix 1 Section 1.3.2 states that “Our (EPA) preliminary view is that the following types of petroleum-contaminated sites are high risk sites, or are not of “relatively low risk.”

1. “High risk” sites currently being cleaned up using LUST trust fund monies.
2. Any petroleum-contaminated site that currently is subject to a response under the Oil Pollution Act (OPA).

Note: Any site that does not fall under any of the provisions listed above would be considered to be of relatively low risk for the purposes of determining eligibility for a brownfields grant.”

Response: The tax lots associated with the Allen Boulevard site have not and are not receiving cleanup funding from LUST trust monies. The property is also not subject to a response under the Oil Pollution Act. Therefore, ODEQ considers that the site is of relatively low risk.

“A Site for Which There is No Viable Responsible Party”

Appendix 1 Sections 1.3.2 states “A petroleum-contaminated site may be determined to have no responsible party if the site was last acquired (regardless of whether the site is owned by the applicant) through tax foreclosure, abandonment, or equivalent government proceedings, and that site meets the criteria in (1) below. Any petroleum-contaminated site not acquired by a method will be determined to have a responsible party if the site fails to meet the criteria in both (1) and (2) below.

- 1) No responsible party has been identified for the site through:
 - (a) an unresolved judgment rendered in a court of law or an administrative order that would require any party (including the applicant) to conduct the activities (including assessment, investigation, or cleanup) contemplated by the grant proposal;
 - (b) an unresolved enforcement action by federal or state authorities that would require any party (including the applicant) to conduct the activities (including assessment, investigation, or cleanup) contemplated by the grant proposal; or
 - (c) an unresolved citizen suit, contribution action or other third party claim brought against the current or immediate past owner for the site that would, if successful, require the activities (including assessment, investigation, or cleanup) contemplated by the grant proposal to be conducted.
- 2) The current and immediate past owner did not dispose of, or own the subject property during the dispensing or disposal of any contamination at the site, did not exacerbate the contamination at the site, and took reasonable steps with regard to the contamination at the site.

Response: The City of Beaverton currently owns the Allen Boulevard property. Albertsons grocery store previously owned the property. Neither the City nor Albertsons dispensed petroleum at the property. The City-owned property is impacted by petroleum contamination from the Shell Service Station #121438, located immediately north of the property. The City intends to construct a Public Safety Center to meet a critical community need, however they cannot wait until the Shell Station cleanup is complete in order to begin site development. Therefore, they are requesting funding to assist with managing site risk, which would include development of a Contaminated Media Management Plan and engineering controls to mitigate risk from vapor intrusion into the new buildings.

DEQ has not identified any unresolved judgments rendered in a court of law or an administrative order that would require a party to assess, investigate, or cleanup the site. ODEQ does not have any unresolved enforcement actions against any party to assess, investigate, or cleanup the site. ODEQ has not identified any unresolved citizen suit, contribution action or other third party claim brought against the current or former owners that would require a party to assess, investigate, or cleanup the site. DEQ does not have information to indicate that the current and immediate past owners dispensed petroleum products. DEQ is not aware of any environmental investigations on the property. The site address is not listed in DEQ's Leaking Underground Storage Tank (LUST) database or Environmental Cleanup Site Information (ECSI) database.

Based on the information currently available, both the current and past owners of the property are not viable responsible parties. This determination is solely for the purposes of determining eligibility for the City of Beaverton's Brownfield Program funding.

"Cleaned Up by a Person Not Potentially Liable"

Appendix 1 Section 1.3.2 states "Brownfields funding may be awarded for the assessment and cleanup of petroleum-contaminated sites provided they meet the requests below:

- 1) the applicant has not dispensed or disposed of or owned the property during the dispensing or disposal of petroleum or petroleum-product at the site, and
- 2) the applicant did not exacerbate the contamination at the site and took reasonable steps with regard to the contamination at the site."

Response:

The City of Beaverton (applicant) has not dispensed or disposed of or owned the property during the dispensing or disposal of petroleum product at the site. The City of Beaverton has not exacerbated the contamination at the site.

"Is Not Subject to Any Order Issued under §9003(h) of the Solid Waste Disposal Act"

The City of Beaverton is not subject to a corrective action order under RCRA §9003(h).

Based on the above information, ODEQ has determined that the Allen Boulevard site is eligible for funding from the City of Beaverton's Brownfield grant.

If you have any questions or need clarification of any of the issues addressed in this letter, please do not hesitate to call me at (503) 229-5585.

Sincerely,

Rebecca Wells-Albers

Rebecca Wells-Albers
Brownfields Coordinator
DEQ Northwest Region Office

Cc (e-mail): David Tetrick, City of Beaverton
Janiene Lambert, City of Beaverton
Seth Otto, Maul Foster and Alongi



Oregon

Kate Brown, Governor

Department of Environmental Quality

Northwest Region

700 NE Multnomah Street, Suite 600

Portland, OR 97232

(503) 229-5263

FAX (503) 229-6945

TTY 711

November 13, 2017

Susan Morales

U.S. Environmental Protection Agency, Region 10

1200 Sixth Avenue, Suite 900 (ECL-122)

Seattle, WA 98101-3140

Re: DEQ Support for the City of Beaverton's Application for two Brownfield Cleanup Grants for the Allen Boulevard Site

Dear Ms. Morales:

The Oregon Department of Environmental Quality (DEQ) supports the City of Beaverton's applications for two EPA Brownfield Cleanup Grants for the Allen Boulevard Site. If awarded, the City would use grant funds to mitigate the risk posed from petroleum contamination that migrated onto their property from the Shell Service Station # 121438, located adjacent to the City's property. The grant awards would provide funding for the City to develop a Contaminated Media Management Plan (CMMP) and install engineering controls necessary to mitigate site risk to construction and excavation workers and to future users of a proposed Public Safety Center and Plaza. The City of Beaverton is not responsible for the petroleum contamination that has migrated onto their property. Site development is critical to meeting the needs of the community and therefore the City cannot wait until the Shell Service station cleanup is complete before beginning construction of the Public Safety Center.

DEQ's Leaking Underground Storage Tank (LUST) Program is conducting project management oversight of the Shell Service Station, located at 6055 SW Hall Boulevard. Investigations at the Shell site have included soil, groundwater, and soil vapor sampling to determine the extent of contamination associated with the release of petroleum from the Shell Service Station. Data from these investigations indicate that petroleum contamination migrated onto the City of Beaverton's Allen Boulevard property, but is not currently posing a risk to site users. However, future development of the City's property includes construction of a Public Safety Center over a portion of the contaminant plume, which if left unaddressed, could pose a risk to future users of the property.

The City of Beaverton is not responsible for the petroleum contamination on their property, but they wish to develop the Public Safety Center and Plaza to address community need. A petroleum eligibility determination is enclosed with this letter.

DEQ supports the City of Beaverton's applications for EPA Brownfield Cleanup Grants and their desire to address site risk as part of the development of a Public Safety Center. Please contact Rebecca

Wells-Albers, DEQ Northwest Region Brownfield Coordinator at 503-229-5585 if you have any questions.

Sincerely,



Nina DeConcini

Administrator, DEQ Northwest Region

Enclosure

Cc (email): Rob Hood, NWR/DEQ
Rebecca Wells-Albers, NWR/DEQ
Paul Seidel, NWR/DEQ
Gil Wistar, NWR/DEQ
Cheryl Grabham, NWR/DEQ
David Tetrick, City of Beaverton
Seth Otto, Maul Foster and Alongi

ATTACHMENT C
LETTERS OF COMMITMENT FROM COMMUNITY
ORGANIZATIONS

November 15, 2017

USEPA Headquarters William Jefferson Clinton Building
1200 Pennsylvania Ave., N.W.
Washington, DC 20460

Dear EPA Office of Grants,

We are writing to you to show our support for the City of Beaverton's proposal to the United States Environmental Protection Agency's Brownfields Cleanup Grant Program for the Beaverton Public Safety Center project. Our organization represents over 6,000 members and 700 partners in the City of Beaverton with more than 35,000 employees. Our Chamber was represented on the Public Safety Center Advisory Committee for more than 5 years as they examined alternatives, design and the bond levy was passed.

We support the City's effort to construct a new public safety facility that will enhance services throughout our community. The current public safety center is a commercial office building that was not built for the modern needs of police or emergency responders. A thriving community needs a strong police and emergency system that is ready to respond.

As we move forward with the construction of the new public safety facility, it is important to ensure cost effective ways to enhance the location.

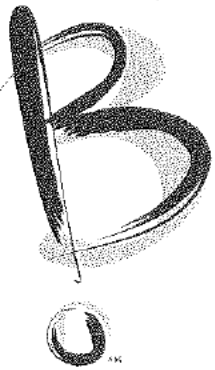
With support from the EPA, funds from the cleanup grant will assist the City with properly remediating brownfield sites near the location of the public safety facility.

On behalf of our Board of Directors, thank you for your review of the City of Beaverton's application.

Sincerely yours,



Lorraine Clarno, member
Public Safety Center Advisory Committee
President/CEO, Beaverton Area Chamber of Commerce



BEAVERTON AREA
Chamber of Commerce

12600 SW Crescent St., Suite 160
Beaverton, OR 97005

503.644.0123 MAIN
503.526.0349 FAX

www.beaverton.org

Jim McCreight
3800 SW Cedar Hills Blvd., Suite 260
Beaverton, OR 97005

USEPA Headquarters William Jefferson Clinton Building
1200 Pennsylvania Ave., N.W.
Washington, DC 20460

Dear EPA Office of Grants,

It is my pleasure to write this letter of support for the City of Beaverton's proposal to the United States Environmental Protection Agency's Brownfields Cleanup Grant Program for the Beaverton Public Safety Center project.

As the chair of the Public Safety Center Advisory Committee, I worked for a number of years with our committee members on the site selection process for the building. I saw the need for an updated, earthquake-resistant facility that can effectively serve the safety needs of our community. Our committee helped the city with the campaign that ultimately earned the support of Beaverton voters who approved the \$35 million bond measure. The location at the corner of SW Allen Blvd and SW Hall Blvd was strategically selected to be the site of the Beaverton Public Safety Center as it is central to three of our police precincts.

The Brownfields Clean Up grant is critical because it will help provide the necessary resources to turn a blighted location into a welcoming and inclusive space for all. Our committee saw the particular site as key to the project. We encouraged the city to look at acquiring this parcel and understand that with the EPA's help, we can clean the site and integrate it into our community vision for the area.

Thank you for your consideration of the City of Beaverton's application.

Sincerely yours,

A handwritten signature in black ink, reading "Jim McCreight". The signature is fluid and cursive, with a large, stylized "J" and "M".

Jim McCreight, Chair
Public Safety Center Advisory Committee;
Director of Strategic Partnership
Oregon Technology Business Center

USEPA Headquarters William Jefferson Clinton Building
1200 Pennsylvania Ave., N.W.
Washington, DC 20460

Dear EPA Office of Grants,

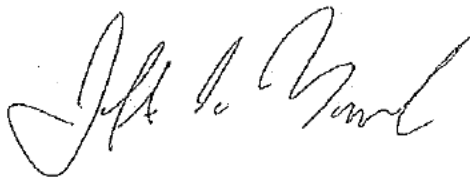
I am writing to you to show my support for the City of Beaverton's proposal to the United States Environmental Protection Agency's Brownfields Cleanup Grant Program for the Beaverton Public Safety Center project.

As the vice chair of the Highland Neighborhood Association Committee, I support the City's effort to construct a new public safety facility that will enhance services throughout the community and improve the makeup of our neighborhood. Recently, a representative of our neighborhood participated in the design charrettes for the public safety center. This was valuable for our neighborhood in being able to voice our opinions of the design of the building. The Highland Neighborhood Association Committee will continue to actively engage with City staff as planning continues.

As the City moves forward with the construction of the public safety center, it is important to ensure active participation of our neighborhood residents in order to ensure the needs of the community are met.

Thank you for your review of the City of Beaverton's application.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Jeff Menzel". The signature is fluid and cursive, with the first name "Jeff" being more prominent and the last name "Menzel" following in a similar style.

Jeff Menzel, Vice Chair
Highland Neighborhood Association Committee

ATTACHMENT D
DOCUMENTATION INDICATING THAT LEVERAGED
FUNDS ARE COMMITTED

A RESOLUTION APPROVING THE RECORDING OF \$34,999,828 IN PROCEEDS FROM THE GENERAL OBLIGATION BONDS, SERIES 2017, IN THE CAPITAL DEVELOPMENT FUND OF THE CITY DURING THE FY 2016-17 BUDGET YEAR AND APPROVING THE APPROPRIATIONS FOR THE FUND

WHEREAS, the City Council reviews and approves the annual budget; and,

WHEREAS, during the year the Council may authorize the receipt of general obligation bonds sale proceeds and approve the associated appropriations of the bond sale through a Special Purpose Budget Adjustment Resolution; and,

WHEREAS, \$34,999,828 was received by the City from the General Obligation Bonds, Series 2017, bond sale to construct and equip a new public safety center, and the Council desires to record the bond sale proceeds and appropriate expenditures associated with the bond sale totaling \$398,617 and provide \$500,000 for estimated expenditures for the public safety center for the remainder of FY 2016-17; now therefore,

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF BEAVERTON, OREGON:

Section 1. The Finance Director is hereby authorized and instructed to adjust the Capital Development Fund budget to reflect receipt of proceeds from the General Obligation Bonds, Series 2017, and the associated appropriations as follows:

Capital Development Fund – Public Safety Center Project 3509

Revenues:

Bond Sale Proceeds	301-03-3509-451	\$34,999,828
--------------------	-----------------	--------------

Expenditures:

Bond Issuance Costs	301-70-3509-497	\$ 99,118
Underwriter's Discount	301-70-3509-498	\$ 299,499
Capital Outlay Expense	301-70-3509-683	\$ 500,000

Contingency	301-70-3509-991	\$34,101,211
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Adopted by the Council this 21st day of March, 2017.

Approved by the Mayor this 22nd day of March, 2017.

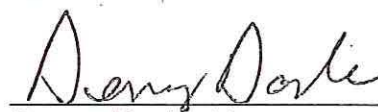
Ayes: 4

Nays 0

ATTEST:

APPROVED:


Catherine Jansen, City Recorder


Denny Doyle, Mayor

STATE OF OREGON
COUNTY OF WASHINGTON
CITY OF BEAVERTON

}

ss CERTIFICATION

I, CATHERINE JANSEN, Recorder for the City of Beaverton, Washington County, Oregon, certify and attest that I have compared this copy with its original and determined this instrument is a true and correct copy of the original which is part of the official records of the City of Beaverton, Oregon.

Dated this 22ND day of MARCH, 2017.

Catherine Jansen
RECORDER, City of Beaverton

ATTACHMENT E
COMMUNITY OUTREACH DOCUMENTATION

**City of Beaverton
Public Hearing Notice
The Oregonian Legal Ads
Issue for Weeks of October 29 and November 5, 2017**

Contact Person: David Tetrick, Economic Development Project Coordinator (503-526-2537)
(dtetrick@beavertonoregon.gov)

**City of Beaverton – Notice of Public Hearing:
Environmental Protection Agency Brownfields Cleanup Grant for Public Safety
Center Site**

Notice is hereby given that a public hearing will be held before the City of Beaverton City Council in the City Hall Council Chamber, located at 12725 SW Millikan Way, Beaverton, Oregon, on Tuesday, November 7, 2017, at 6:30 p.m., for the purpose of receiving public comment on the following:

The City of Beaverton has the opportunity to submit an application to the U.S. Environmental Protection Agency (EPA) for a Brownfields Cleanup Grant to help fund cleanup of petroleum contamination at the site of the future Public Safety Center.

The site of the planned Public Safety Center (PSC) at 12500 SW Allen Blvd, Beaverton, OR 97005 has been impacted by petroleum contamination from the adjacent gasoline station. The EPA Brownfields Cleanup Grant funds would contribute to remediation of the site and eligible costs for development of the PSC. The draft grant application and draft cleanup plan will be available for public review and comment at www.BeavertonOregon.gov/BrownfieldsGrant as of November 1, 2017. The City Council invites testimony from interested citizens on this matter. Written testimony may be submitted by email to the Office of the City Recorder at citymail@beavertonoregon.gov or by mail to, P.O. Box 4755, 12725 SW Millikan Way, Beaverton, Oregon, 97076 prior to 5:00 p.m. on November 14, 2017. Written and verbal testimony may also be submitted to Council during the hearing. Public hearings are conducted in accordance with adopted procedures for these meetings.

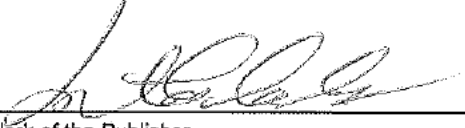
Dated this 27th day of October 2017
David Tetrick, Economic Development Project Coordinator
City of Beaverton
Publish 10/29 and 11/5/2017

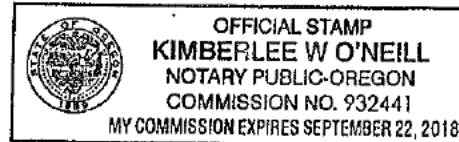
State of Oregon,) ss

County of Multnomah)


Justin Eubanks being duly sworn, deposes that he/she is principal clerk of Oregonian Media Group; that The Oregonian is a public newspaper published in the city of Portland, with general circulation in Oregon, and this notice is an accurate and true copy of this notice as printed in said newspaper, was printed and published in the regular edition and issue of said newspaper on the following date(s):

The Oregonian 10/29, 11/05/2017


Principal Clerk of the Publisher



Sworn to and subscribed before me this 6th day of November 2017


Notary Public

**City of Beaverton - Notice of Public Hearing: Environmental Protection Agency
Brownfields Cleanup Grant for Public Safety Center Site**

Notice is hereby given that a public hearing will be held before the City of Beaverton City Council in the City Hall Council Chamber, located at 12725 SW Millikan Way, Beaverton, Oregon, on Tuesday, November 7, 2017, at 6:30 p.m., for the purpose of receiving public comment on the following:

The City of Beaverton has the opportunity to submit an application to the U.S. Environmental Protection Agency (EPA) for a Brownfields Cleanup Grant to help fund cleanup of petroleum contamination at the site of the future Public Safety Center.

The site of the planned Public Safety Center (PSC) at 12500 SW Allen Blvd, Beaverton, OR 97005 has been impacted by petroleum contamination from the adjacent gasoline station. The EPA Brownfields Cleanup Grant funds would contribute to remediation of the site and eligible costs for development of the PSC. The draft grant application and draft cleanup plan will be available for public review and comment at www.BeavertonOregon.gov/BrownfieldsGrant as of November 1, 2017. The City Council invites testimony from interested citizens on this matter. Written testimony may be submitted by email to the Office of the City Recorder at citymail@beavertonoregon.gov or by mail to, P.O. Box 4755, 12725 SW Millikan Way, Beaverton, Oregon, 97076 prior to 5:00 p.m. on November 14, 2017. Written and verbal testimony may also be submitted to Council during the hearing. Public hearings are conducted in accordance with adopted procedures for these meetings.

Dated this 27th day of October 2017

David Tetrick, Economic Development Project Coordinator
City of Beaverton

Published 10/29 and 11/5/2017

City of Beaverton – City Council Meeting Excerpt

The following is an **EXCERPT** of the Draft Beaverton City Council Meeting Minutes of November 7, 2017, and reflect the Visitor Comments and Public Hearing sections of the meeting regarding the Public Safety Center Brownfields Cleanup Grant Opportunity (Agenda Bill 17224). (2 Pages)


Catherine Jansen, City Recorder - Date 11/15/17

BEAVERTON CITY COUNCIL
REGULAR MEETING
NOVEMBER 7, 2017

CALL TO ORDER

The Regular Meeting of the Beaverton City Council was called to order by Mayor Denny Doyle in the Beaverton City Hall, City Council Chamber, 12725 SW Millikan Way, Beaverton, Oregon, on Tuesday, November 7, 2017, at 6:30 p.m.

ROLL CALL

Present were Mayor Denny Doyle, Councilors Cate Arnold, Lacey Beaty, Mark Fagin and Marc San Soucie. Councilor Betty Bode was excused. Also present were City Attorney Bill Kirby, Finance Director Patrick O'Claire, Human Resources Director Angela Moreschi, Community Development Director Cheryl Twete, Library Director Abigail Elder, Public Works Director David Donaldson, Police Chief Jim Monger, Police Captain Eric Oathes, BCA General Manager Chris Ayzoukian, Economic Development Project Coordinator David Tetrick, Economic Development Manager Michael Williams, Development Division Manager Cadence Petros, Program Manager George Fetzer, and City Recorder Catherine Jansen.

FLAG CEREMONY - PROCLAMATIONS - PRESENTATION

VISITOR COMMENT PERIOD

(b) (6) [REDACTED] Beaverton, said she appreciated participating in the Public Safety Center (PSC) design workshop and was heartened by the openness and commitment to creating a facility that welcomed and integrated the Allen Boulevard community, the residents and businesses, as well as the residents of the surrounding local community. She was glad they recognized the facility would have a tremendous impact on this community. It was important to balance a welcoming design to the community and to serve the purposes of safety and security of the PSC. She said it was clear in going through the design process that a major constraint was the gas station on the corner and that there were extensive brownfields. Her group designed around these constraints and ignored them, which limited severely what she believed could have been a much better design option, as well as a much more welcoming facility from the community's point of view. The constraints eliminated a lot of green and potential community space. The other major consideration that limited the design creativity was the shadow the brownfields cast in terms of not knowing how much can be remediated. She encouraged the Council to continue to involve the local community in the process and especially reaching out to the Allen Boulevard community in ways that were not the traditional ways of mailings, meetings and get-togethers, but going from the bottom up to engage the community. She encouraged the Council to look favorably upon the two brownfield grant applications before Council at this meeting and to support fully the City's ability to apply for and implement the grants to remediate the brownfields work on that site.

(b) (6), Beaverton, said he attended the design charrette for the Public Safety Center (PSC). The Shell station was responsible for the brownfield. To complete the public face of the PSC effectively would involve the ultimate acquisition and transformation of the Shell station into a public space. He asked the Council to act on acquiring the property sooner than later, before real estate prices increased. Having this property would enhance the design and deliver a quality building to the Allen Boulevard neighborhood and all of Beaverton. He asked what the impression of livability would be for this area with a three-story building in a neighborhood of one-story ranch homes. The answer to livability, sustainability, and resilience was to have large, significant, shade-providing trees. It was important to provide mitigation for environmental injustices for the communities that walk and live along Allen Boulevard who suffer from increased danger of auto collisions, public health hazards, and increased air pollution. Trees provide cleaner air, oxygen, and shade to cool the street. Having large shade trees on Allen and Main to the west of the PSC would help cool the building and reduce energy costs during the summer. The Highland Neighborhood was developed around mature trees making it a significant character of the neighborhood. He brought attention to the tree groves on the southeast corner of the lot that were planted by volunteers, stating they needed to preserve as many trees as possible.

Councilor Arnold confirmed with Captain Oathes the trees were being addressed and he had reached out to City Arborist Pat Hoff, to preserve the trees and incorporate them into the PSC's design because of their significance of having been planted on Arbor Day.

COUNCIL ITEMS - STAFF ITEMS - CONSENT AGENDA

PUBLIC HEARING

17224 Public Safety Center Brownfields Cleanup Grant Opportunity

Economic Development Manager Mike Williams said this public hearing concerned the Public Safety Center (PSC), the Shell station and a grant for the brownfields cleanup.

Economic Development Project Coordinator David Tetrick reviewed the staff report (in the record).

Mayor Doyle opened the public hearing. There was no public testimony or written letters and the public hearing was closed.

There was no further Council or staff discussion.

ORDINANCE - ACTION ITEM - WORK SESSIONS - COUNCIL NEW BUSINESS/COUNCIL AND MAYOR DISCUSSION

ADJOURNMENT

There being no further business to come before the Council at this time, the meeting was adjourned at 9:27 p.m.

/s/ Once Approved by CC
Catherine Jansen, City Recorder

*****End of Excerpt*****

ATTACHMENT F
DRAFT ANALYSIS OF BROWNFIELDS CLEANUP
ALTERNATIVE

FOCUSED ANALYSIS OF BROWNFIELD CLEANUP ALTERNATIVES

ALLEN BOULEVARD PROPERTY



Prepared for
CITY OF BEAVERTON

November 16, 2017
Project No. 0952.01.01

Prepared by
Maul Foster & Alongi, Inc.
2001 NW 19th Avenue, Suite 200, Portland, OR 97209

FOCUSED ANALYSIS OF BROWNFIELD CLEANUP ALTERNATIVES

ALLEN BOULEVARD PROPERTY

*The material and data in this report were prepared
under the supervision and direction of the undersigned.*

MAUL FOSTER & ALONGI, INC.



*Seth Otto, AICP Leed AP
Senior Planner*



*Merideth D'Andrea, RG
Senior Geologist*



*Andrew Kaparos, PE
Project Engineer*



*Patrick O'Claire
Finance Director, City of Beaverton
Mayor Pro Tem*

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ACRONYMS AND ABBREVIATIONS

ABCA	Analysis of Brownfield Cleanup Alternatives
AOC	Area of Concern (the Shell station parcel and its impacts off site [including the contaminated soil and groundwater that have migrated onto the Property])
BAC	Beaverton Activities Center
bgs	below ground surface
City	City of Beaverton
CMMP	contaminated-media management plan
COC	contaminant of concern
CSM	conceptual site model
DEQ	Oregon Department of Environmental Quality
ESA	environmental site assessment
GeoDesign	GeoDesign, Inc.
LBP	lead-based paint
LUST	leaking underground storage tank
OAR	Oregon Administrative Rules
Property	City-owned BAC property at 12500 SW Allen Boulevard, Beaverton, Oregon
RAO	remedial action objective
RBC	risk-based concentration
ROW	right-of-way
SSD	Subslab depressurization
TPH	total petroleum hydrocarbons
URS	URS Corporation
USEPA	U.S. Environmental Protection Agency
UST	underground storage tank
VOC	volatile organic compound

1 INTRODUCTION

This Focused Analysis of Brownfield Cleanup Alternatives (ABCA) report has been prepared for the City of Beaverton (City)-owned Beaverton Activities Center (BAC) property located at 12500 SW Allen Boulevard in Beaverton, Oregon (the Property). This ABCA contains the elements of a corrective action plan consistent with Oregon Administrative Rules (OAR) 340-122-0250, as well as additional brownfield-specific corrective action elements, including a public participation strategy and consideration of potential effects on endangered species and cultural resources should a corrective action be implemented.

1.1 Purpose and Objectives

This ABCA was completed to meet the requirements of U.S. Environmental Protection Agency (USEPA) Brownfields Cleanup Grants and the applicable Oregon Department of Environmental Quality (DEQ) regulatory requirements. The focused remedial alternatives are evaluated consistent with the USEPA ABCA process as required prior to remedial design. More specifically, the purpose of this ABCA report is to present a viable remedial alternative based on site-specific conditions, technical feasibility, and preliminary cost evaluations.

In this ABCA, the Shell station property and its impacts off site (including the petroleum contaminated soil and groundwater that have migrated onto the Property) are referred to as the Area of Concern (AOC). Our understanding is that Equilon Enterprises, LLC, dba Shell Products US, has been performing ongoing investigation activities and that remediation efforts are forthcoming. However, exact plans for source remediation and timing of remedy implementation are unknown. Several assumptions (described below) have been made based on this understanding.

This ABCA includes:

- Information about the AOC and contamination issues (e.g., exposure pathways, identification of contaminant sources), cleanup standards, applicable laws, and the proposed cleanup
- Effectiveness, implementability, and the cost of the preferred remedial alternative
- An assessment of the need for additional land-use controls after the remediation is complete

1.2 Assumptions

The Property has contamination impacts from the Shell station property. It is assumed that the sources of contamination will be addressed (by others), independent of the development of a proposed Public Safety Center. Several investigations and assessments have been completed for the AOC. It is evident

that contaminated soil, groundwater, and vapor from the Shell station property have migrated onto the Property.

For the purposes of this ABCA, it is assumed that sources of contamination from the Shell station property will be remediated separately (which may include underground storage tank [UST] decommissioning and removal, contaminated-soil excavation and off-site disposal, and clean backfill mixed with an in-situ bioremediation product).

The remedial options considered in this ABCA are focused on the risk management associated with redevelopment of the Property. Although it is assumed that the AOC will be remediated, there is no set timetable on when cleanup goals will be achieved. Therefore, the City cannot move forward with the Property redevelopment without implementing the risk management measures presented and evaluated in the following report.

Typical ABCA reports include the evaluation and analysis for a broad range of alternatives, including a no-action alternative. The no-action alternative usually serves as a benchmark against which the proposed action can be evaluated. However, based on the Property and AOC conditions described above, the no-action alternative is essentially not viable given existing state and federal laws and regulations associated with the protection of human health and the environment. Therefore, the no-action alternative is not included in this evaluation and analysis.

The objective of this ABCA is to identify and evaluate the most relevant remedial alternative that reduces contaminant exposure to levels that are protective of human health and the environment and that are appropriate for the Property.

2 BACKGROUND

2.1 Property Description

The Property is located in section 21 of township 1 south and range 1 west of the Willamette Meridian (Figure 1) and includes tax lots 200, 1700, and 1800. The Property is approximately 2.1 acres and contains the existing BAC building (footprint approximately 22,000 square feet), with associated paved parking and landscaped areas. The BAC is located at 12500 SW Allen Boulevard. The Property, Shell station property, and AOC are shown on Figure 2.

The Property is owned, operated, and maintained by the City. The City is considering the construction of a new facility consisting of one, three-story building that will total approximately 35,000 square feet of building footprint on the Property. A public plaza area will also be constructed, consisting of an open area that will total approximately 10,000 square feet. This redevelopment plan includes the demolition of the existing structures on the Property. The redevelopment plans are currently at the conceptual level, but will most likely involve the construction of a new building in the central-northwest portion of the Property, adjacent to the Shell station property.

As mentioned above, petroleum releases are known to have occurred at the Shell station property. These releases and other impacts from the Shell station property have already been documented and are briefly summarized below along with descriptions of the Property.

2.2 Geology and Hydrogeology

The Property is situated in the northern portion of the Willamette Valley physiographic province and is located in the Tualatin Basin. The basin is a structurally down-warped basin generally filled with alluvial deposits and underlain at depth by basaltic rock (URS Corporation [URS], 2013).

As described by previous investigations, the subsurface geology at the Property consists primarily of silty clay or brown, silty sand underlain by high-plasticity clay and brown silt to a depth of 20 feet below ground surface (bgs) (URS, 2013).

Based on historical water level information, the potentiometric surface occurs at depths ranging between 5 and 12 feet bgs, and is inferred to flow northwest. The current BAC located south of the Shell station is considered to be hydraulically upgradient of the gasoline station. However, the proposed redevelopment will take place on the north portion of the Property, which is downgradient of the Shell station (and its impacted soil and groundwater). The distribution of petroleum hydrocarbons in groundwater also supports a northwest groundwater flow direction.

The groundwater depths and elevations for the AOC are provided in the historical tables in the appendix.

2.3 Property and AOC History

Several assessments have been completed at the Property and the adjacent Shell Station property. These investigations, as well as and cleanup actions, are documented in the following reports, some of which are referenced throughout this ABCA:

- AECOM's August 12, 2015, second quarter 2015 groundwater and soil gas monitoring report for the Shell service station.
- AECOM's fourth quarter 2016 groundwater and soil gas monitoring report for the Shell service station (AECOM, 2017).
- URS's conceptual site model and risk-based evaluation report (URS, 2012a).
- URS's conceptual site model addendum Phase II site assessment (URS, 2012b).
- URS's additional site investigation Report for the shell service station (URS, 2013).
- URS's January 2015 off-site stormwater system video camera survey.
- GeoDesign, Inc.'s (GeoDesign) May 2017 revised environmental site summary and preliminary cost estimate memorandum.
- GeoDesign's soil gas assessment for BAC (GeoDesign, 2017a).
- GeoDesign's hazardous building materials survey (GeoDesign, 2017b).

A gasoline release was detected in February 1994 at the Shell station property during the installation of a vapor recovery system (URS, 2012b). Impacted soil (16.45 tons) was removed and confirmation

samples were collected. The residual concentrations of petroleum hydrocarbons were below applicable risk-based concentrations (RBCs) set by the DEQ for soil and groundwater. As a result, the gasoline station was issued a No Further Action determination by DEQ in October 2004.

In January 2006, a diesel release to soil and groundwater was discovered and reported to DEQ. As a result, the Shell station property was listed under DEQ's Leaking Underground Storage Tank (LUST) file number 34-06-0149. A Phase II environmental site assessment (ESA) was conducted at the gasoline station in August 2007 (URS, 2012b). The ESA investigation included advancing multiple borings for the collection of soil and groundwater samples. Petroleum constituents were detected in soil and groundwater north and west of the service station building, north of the dispenser islands, and south of the UST basin at concentrations exceeding applicable DEQ RBCs.

As a result, several investigations were completed to evaluate the magnitude and extent of impacts to soil, groundwater, and soil gas. Petroleum contamination from the Shell station property has migrated west/northwest to the Property (as described above, the northern portion of the Property is hydraulically downgradient of the gasoline station). Therefore, some of these previous investigations also included some sampling locations on the Property. Collectively, the contamination footprint is referred to as the AOC.

2.4 Previous Investigations

Previous investigations included installing 14 monitoring wells and five permanent soil gas wells, collecting quarterly groundwater and soil gas monitoring samples, conducting a video camera survey of the stormwater system, and performing a hazardous-building-materials survey.

2.4.1 Soil Impacts

Impacts to soil appear to be located primarily on, and west of, the Shell Station property at depths greater than 5 feet bgs. The impacts to soil appear to be associated with petroleum releases that originated on the Shell Station property and migrated off site to the west/northwest in groundwater. Limited analytical data for soil above 5 feet bgs are available, but impacts to soil appear to be limited to the northwest portion of the Property and into the SW Allen Boulevard right-of-way (ROW).

Historical soils analytical data have been compiled and are provided in the appendix.

2.4.2 Groundwater Impacts

Impacts to groundwater have been evaluated and are located primarily on the central and western portions of the Shell Station property and the northern portion of the Property, likely including the southern portion of the SW Allen Boulevard ROW. Impacts to groundwater do not appear to be present beneath the existing BAC, located south (upgradient) of the Shell Station property.

Historical groundwater analytical data have been compiled and are provided in the appendix.

2.4.3 Soil Gas Impacts

Volatile organic compounds (VOCs) were detected at concentrations that exceeded occupational DEQ Vapor Intrusion into Buildings RBCs on the northern portion of the Property (west of the gasoline station) (AECOM, 2017).

Historical soil gas vapor data have been compiled and are provided in the appendix.

2.4.4 Hazardous Building Materials

A hazardous building materials survey for the BAC building and the vacant residence was completed in 2017. This included an asbestos-containing-material survey to evaluate the potential presence of asbestos in suspect materials in the Property structures. A lead-based paint (LBP) survey was also completed to evaluate paint throughout the Property structures.

The BAC building is a wood-framed, single-story structure with concrete/cinder block walls and slab-on-grade foundation (constructed in 1964). The residence is a wood-framed, single-story structure with wood walls and foundation (approximately 2,150 square feet).

Six of the 85 samples analyzed contained more than one percent asbestos. These samples were collected from the roof and crawlspace of the BAC, and from the residence bathroom tile, flooring, and window materials (GeoDesign, 2017b).

A total of 109 representative painted surfaces were analyzed using X-ray fluorescence, and were visually assessed for general condition. LBP was identified in nine of the 109 discrete testing locations. Based on these results, LBP was detected at the residence on the white exterior window trims, exterior white eaves fascia and gutter, exterior white garage door, exterior green stairs, and the white walls and bathroom ceiling. LBP was not detected at the locations tested at the BAC (GeoDesign, 2017b).

Additionally, fluorescent lights and thermostats present in the BAC and the residence may contain hazardous materials.

3 CONCEPTUAL SITE MODEL AND SCREENING LEVELS

3.1 Conceptual Site Model and Exposure Pathways

In 2012, a conceptual site model (CSM) for the Shell Station property release was prepared, in which information regarding existing and reasonably likely future land uses was summarized and used to develop a model describing potential human and ecological exposures (URS, 2012a).

The CSM recognized that the Shell station property has a restrictive covenant preventing future groundwater use and residential use, reflecting the fact that the potential receptors at the Shell station property are occupational and include construction and excavation workers. The CSM-identified potentially complete exposure pathways to occupational receptors at the Shell station included direct contact, volatilization to outdoor air, and vapor intrusion into buildings from soil and groundwater. **The identified potentially complete exposure pathways for occupational receptors at the Property are consistent with this determination and include direct contact, volatilization to outdoor air, and vapor intrusion into buildings from soil and groundwater.**

3.2 Contaminants of Concern

The contaminants of concern (COCs) for the AOC include gasoline-range hydrocarbons, diesel-range hydrocarbons, residual-range hydrocarbons (oil), and their associated constituents in soil, groundwater, and soil gas. See Figure 2 for an approximate contaminant plume boundary, as indicated by DEQ.

3.2.1 Soil Screening

TPH-G, VOCs, and polycyclic aromatic hydrocarbons were detected in soils above the method detection limits. Soil results were compared against RBCs for the following potentially complete receptor pathways:

- Excavation and Construction Worker for Soil Ingestions, Dermal Contact, and Inhalation
- Occupational Worker receptors for Volatilization to Outdoor Air
- Occupational Worker receptors for Vapor Intrusion into Buildings

These RBCs and sampling results are provided in the historical tables in the appendix. Ethylbenzene was the only analyte detected in soil above the RBC protective of Occupational Workers for Vapor Intrusion into Buildings. Exceedances were in locations MW-106, MW-107, and MW-110, all located on the northern portion of the Property (see historical figures provided in the appendix).

3.2.2 Groundwater Screening

Groundwater results were compared against RBCs for the following potentially complete receptor pathways:

- Occupational receptors for Vapor Intrusion into Buildings
- Occupational receptors for Volatilization to Outdoor Air
- Excavation and Construction Worker for Groundwater in an Excavation

These RBCs and sampling results are provided in the appendix. Historically, groundwater exceedances have been observed primarily on the Shell Station property, west of the services building (MW-101 and MW-105). There has also been one isolated exceedance of gasoline in the northern portion of the Property (MW-110) above the excavation and construction worker RBC.

3.2.3 Soil Gas Screening

Based on the Property's current and likely potential future land use, the chemical analytical results were compared to the DEQ RBCs for Vapor Intrusion into Buildings for urban residential and occupational receptors. These RBCs and sampling results are provided in the appendix.

Historically, soil gas exceedances associated with the AOC have been found primarily in monitoring locations SG-2 and SG-4, located on the Property, west of the Shell Station property. Constituents exceeding the vapor intrusion RBCs in those locations have included gasoline, benzene, ethylbenzene, naphthalene, ethylene dibromide, and ethylene dichloride. There have also been some occasional exceedances in location SG-3. In 2015, concentrations of soil gas for total petroleum hydrocarbons (TPH) referenced to gasoline, benzene, and naphthalene were detected above the Vapor Intrusion into Buildings RBC protective of occupational workers. In 2016, concentrations of TPH referenced to gasoline in the soil gas samples collected from SG-2 and SG-4 and concentrations of benzene in SG-2 exceeded the Soil Gas Vapor Intrusion into Buildings RBCs for occupational receptors. It is also worth noting that laboratory detection limits for multiple constituents in the 2016 samples from SG-2 and SG-4 are above RBCs, and therefore these analytes may be present at concentrations greater than the RBCs (but below the reported detection limit).

In 2017, GeoDesign conducted soil gas sampling on the Property, north of the BAC and south of the Shell station (GeoDesign, 2017a). None of the detected concentrations of gasoline-range hydrocarbons and VOCs exceeded the applicable DEQ RBCs. These analytical results indicate that post-release soil gas conditions at (and south of) the soil gas sampling locations do not pose an unacceptable risk to urban residential and occupational receptors.

Based on historical soil gas monitoring, soil gas vapor from gasoline-range hydrocarbons and VOCs are a potential concern for any future structures built on the northern portion of the Property.

4 ANALYSIS OF BROWNFIELD CLEANUP ALTERNATIVES

The purpose of this ABCA is to identify and evaluate the most relevant remedial alternative that reduces contaminant exposure to levels that are protective of human health and the environment and that are appropriate for meeting the remedial action objectives (RAOs) for the Property. This ABCA was completed in general accordance with USEPA guidelines for conducting an ABCA and Oregon regulations for conducting feasibility studies (OAR 340-122-0085). This document is a draft and will be presented for public comment. This ABCA contains the following elements:

- Summary of COCs
- Development of remedial action area and RAOs
- Evaluation and presentation of proposed cleanup alternative
- Discussion of residual risks associated with recommended alternative

4.1 Remedial Action Area and Objectives

As described above, vapor from soil or groundwater to indoor air for occupational and urban residential exposures and the direct contact with COCs in soil and groundwater for excavation and construction workers represent the exposure pathways for current or future human health risk at the Property. This ABCA assumes that the AOC is a separate remedial action area. Therefore, the main zones of potential contamination that are considered as part of the Property remedial action area include:

- Subsurface soils west of the Shell station property and in the SW Allen Boulevard ROW
- Groundwater present to the north and west of the Shell station and extending to the northeast corner of the Property
- Potential impacts from soil gas as vapor intrusion into any buildings that are located west of the Shell station
- Asbestos, lead, and potential hazardous materials present in existing structures

RAOs for the Property have been developed to protect receptors and provide the underlying basis for developing and evaluating remedial actions. The RAOs are:

- Preventing direct contact between human receptors and soil exceeding applicable RBCs
- Preventing direct contact between human receptors and groundwater exceeding applicable RBCs
- Preventing VOC vapors from migrating into indoor air (eliminating the vapor migration pathway)
- Preventing VOC vapors from volatilizing to outdoor air
- Preventing direct contact and inhalation of asbestos, lead, and potential hazardous materials present in existing structures

4.2 Remedial Alternatives Considered

Typically, under DEQ removal authority (OAR 340-122-0040) and USEPA guidance (USEPA, 2014), remedial alternatives are evaluated using the following criteria:

- Effectiveness
- Long-term reliability
- Implementability
- Implementation risk
- Sustainability
- Susceptibility to climate change
- Reasonableness of cost

The objective of a remedial alternative is to mitigate risk from chemical concentrations present at a site, such that any potential exposures do not exceed levels protective of human health and the environment.

Remedial options in this ABCA, however, are limited to the Property because time limitations driven by Property redevelopment do not allow for development to occur post-AOC remediation (i.e., the City would be adversely impacted if compelled to wait for source removal and/or in situ bioremediation actions to take effect before constructing the building).

The objective of each of the following alternatives is to reduce exposure by managing contaminants present at the Property to levels protective of human health and the environment. Because of the nature of the contaminants and given the above timing constraint, two remedial alternatives warrant detailed evaluation. The following sections describe and evaluate the remedial alternatives.

4.3 Alternative 1—No Action

This alternative is included for baseline purposes only and is not considered a long-term solution to environmental issues present at the site. This alternative would not include any activities to remove, treat, monitor, or manage site contamination. If impacted soil were left in place, human exposure to surface soil is possible and the potential for contaminant migration would exist. This alternative is not protective of human health and the environment and RAOs would not be achieved. This alternative is not further evaluated because it will not achieve the RAOs.

4.4 Alternative 2—Institutional controls with limited excavation and a vapor barrier with passive subslab depressurization

The first redevelopment scenario assumes that the AOC will be properly cleaned up but some risk mitigation measures will be necessary to meet the Property's RAOs. This scenario will include the following risk mitigation measures:

Demolition of existing structures. The existing BAC structure and vacant residence will be demolished as part of redevelopment. These structures contain potentially hazardous building materials that will be removed and properly disposed of prior to demolition. However, these costs are not included in the proposed remedial alternative because they cannot be funded by the EPA grant for which this ABCA is intended.

Institutional controls. Institutional controls will be established and are intended to limit or prohibit activities that may interfere with the integrity of a cleanup action and that would result in risk of exposure to contaminated soil at a site. These institutional controls may include legal mechanisms (such as land use restrictions, environmental covenant, zoning designations, and building permit requirements). The existing environmental covenant on the Shell station property for groundwater requires the maintenance of engineering controls and prohibits the use of groundwater until the groundwater has been completely remediated. Prior to building demolition, a contaminated-media management plan (CMMP) would be prepared for use by contractors.

Excavation and Dewatering. Limited excavation of potentially impacted soil would take place during redevelopment. Although it is assumed that the proposed Public Safety Center building would be slab-on-grade foundation, some excavation would likely be necessary for the foundation and footings, and the connecting utilities that would serve the building. This excavation could also reduce sources of contamination to groundwater if the soil is impacted. For the purposes of this ABCA, it is assumed that regrading and utility installation would require limited excavation and off-site disposal of impacted soil. Due to the low volume of soil that will be excavated, on-site treatment would be more expensive in all cases, and is therefore not included for consideration.

It is assumed that the utilities will be relatively shallow, but dewatering could be required. If dewatering is necessary during excavation, dewatering water likely will require treatment prior to discharge. For conservative purposes, dewatering and treatment have been included in this proposed cleanup alternative.

Vapor barrier and passive venting system. This engineering control would be installed at the Property, beneath the new building. A vapor-migration-prevention system would be installed beneath the new building structure and would include a SSD system (passive venting) in accordance with the USEPA design standard.

The system would be passive in nature, allowing accumulated vapors to vent to outdoor air. It would consist of a network of perforated pipes or low-profile drains installed immediately under the vapor barrier geomembrane in the capillary break gravel layer and venting to the atmosphere outside the building foundation.

In order to ensure a competent vapor barrier seal prior to installation of the slab, a construction quality assurance/quality control plan would be prepared and the contractor would be required to pass a smoke test to demonstrate that all seals were complete.

More aggressive systems, such as soil vapor extraction (SVE) systems are typically used for more of a source control measure. Since the AOC will be cleaned up separately, it is assumed that an SVE system would not be needed, and is therefore not included in these alternatives for consideration.

Impermeable Cap. This engineering control would be installed in the proposed plaza area in the northern portion of the Property. An impervious covering, such as asphalt or concrete, would be installed to prevent vertical migration of potential soil gas vapors, volatilization to outdoor air, and eliminate any direct-contact exposure risks.

It is assumed that the entire surface of the plaza area (excluding any limited greenspace or tree areas) would be capped with asphalt pavement. For the purposes of this ABCA and the development of the remedy cost estimate, it is assumed that the total cap thickness would be 9 inches and would be composed of a 3-inch-thick aggregate base course layer, 2 inches of asphalt base layer, 2 inches of an intermediate asphalt layer, and 2 inches of an asphalt wearing layer. A sealant would be applied to the surface of the asphalt. The cover would be designed such that all stormwater would run off the capped area rather than infiltrate.

4.5 Alternative 3—Institutional controls with limited excavation and a vapor barrier with active SSD

Alternative 3 includes the elements of Alternative 2 except for the passive vapor barrier and venting system. Alternative 3 assumes that in order to meet the Property's RAOs, more aggressive risk mitigation measures will be necessary than those described under Alternative 2. This includes an active vapor system to meet RAOs and prevent vapor migration to indoor air.

Similarly to Alternative 2, demolition of existing structures will be needed but are not included in the cost estimate. Also similarly to Alternative 2, excavation and off-site disposal of impacted material would be necessary for building and utility construction, an impermeable cap would be constructed in the plaza area, and institutional controls would likely be required.

Vapor barrier and active venting system. Similar to Alternative 2, a subslab vapor barrier and venting system would be installed, consisting of a network of perforated pipes, commonly surrounded by clean gravel within a trench, underneath the building slab, that are open to the atmosphere at the building perimeter. However, this system would be converted to an active sub-slab depressurization (SSD) system.

The active SSD system uses mechanical systems (vacuum pumps, blowers, or fans) to create a vacuum beneath the slab and actively vent the subslab gases through vent riser pipes to above the roof. The air flow characteristics and capacity of the subsurface the slab should be quantitatively determined by diagnostic testing performed prior to design. This will determine the appropriate method for drawing soil vapor through the gravel underlying the slab and into the venting pipes for discharge outside the building.

The effectiveness of active SSD systems must be monitored. Besides indoor air testing, evaluation can include monitoring the blower operation and monitoring the reduced pressure beneath the floor. Mechanical components of the active SSD (pumps, blowers, or fans) have a life expectancy of 10-15 years. The operation of the fans should be monitored and maintained on a regular basis. In some instances, incorporating a continuous monitor into the operation of the fan is desirable.

4.6 Evaluation of Remedial Alternatives

Engineering and institutional controls would be used to mitigate residual risk on the Property. Engineering controls would include installation of a vapor mitigation system (with a passive or active SSD) within the proposed building footprint and an impermeable cap in the proposed plaza area. Institutional controls in the form of land use restrictions, an environmental covenant, zoning designations, and/or building permit requirements may be recorded. Groundwater at the Property will not be extracted for drinking water, industrial use, or other purposes.

Prior to demolition of the existing building(s), a CMMP would be prepared for use by contractors. This CMMP will outline the location and the proper handling and disposal of soil, groundwater, and hazardous building materials during construction activities at the Property.

Effectiveness: Both proposed alternatives are effective because engineering controls eliminate the indoor air pathway, and institutional and engineering controls reduce the potential for Property users to come into direct contact with contaminated soil, groundwater, or and hazardous building materials.

Alternative 3 is judged to be more effective than Alternative 2 because it will install a fan, vacuum pump, or blower to actively remove the soil gas vapors from the subsurface while Alternative 2 relies on natural pressure differentials (which can be temporarily or seasonally variable).

Long-term Reliability: The City's development will include institutional controls that will enforce the maintenance of the vapor mitigation system and prevent use of Property groundwater. Therefore, both proposed alternatives are judged to be reliable in the long term.

Alternative 3 requires a power source for the vacuum pumps or blowers, and continued operation and maintenance to keep the system in service. As described above, the vacuum pumps, blowers, or fans may need to be replaced after 10–15 years (typical lifespan). However, these are common systems so finding replacements is not a big concern. Alternative 2 is judged to be more reliable in the long-term.

Implementability: Both proposed alternatives are considered relatively easy to implement because they utilize available contractors and materials.

Implementation Risk: The implementation risk is low for both alternatives. Subcontractors hired to conduct the soil removal will be current with their U.S. Occupational Safety and Health Administration 40-hour Hazardous Waste Operations and Emergency Response training. Work would be performed under a site-specific health and safety plan.

Sustainability: Both proposed alternatives are sustainable. Alternative 2 does not depend on mechanical systems to function but rather relies on natural processes to create a pressure differential and allow vapors to be expelled from the subsurface. Alternative 3 is less sustainable because it relies on a power source for the mechanical system to extract the soil gas vapors. However, depending on the diagnostic testing, it may be possible to utilize solar-powered fans, which is a sustainable energy source. Therefore, both alternatives are judged to be equally sustainable.

Climate Change Concerns: No Property-specific risk factors related to potential climate change have been identified.

Cost: The conceptual-level cost estimate to implement Alternative 2 is approximately \$292,000. The conceptual-level cost estimate to implement Alternative 3 is \$366,000. This does not include costs for the demolition of the existing BAC. A breakdown of these estimated costs is provided in the attached tables.

Public Participation: The ABCA process mandates that public concerns must be addressed during the selection of a cleanup alternative. This ABCA will be included in the EPA grant application that is presented for public comment. Additional public comment periods will likely occur prior to the cleanup of the AOC.

5 PREFERRED BROWNFIELD REMEDIAL ALTERNATIVE

The Property has contamination impacts (groundwater, soil, and soil gas) from the AOC. For the purposes of this ABCA, the AOC includes the Shell station property and its impacts off site (as indicated by the plume that has migrated onto the Property). It is assumed that the sources of contamination will be addressed independent (by others) of the redevelopment of the proposed Public Safety Center.

The owner of the adjacent Shell gasoline station property has been performing ongoing investigation activities, and remediation efforts are forthcoming. However, exact plans for source remediation and implementation schedule are unknown. In order for the City to move forward with redevelopment of the Public Safety Center, several risk management features must be implemented. Alternative 2 is slightly less aggressive than Alternative 3, but is expected to be as reliable and nearly as effective as Alternative 3. In addition, Alternative 2 is over 25-percent less expensive. Therefore, the measures described under Alternative 2 makeup the preferred remedial alternative.

The following risk management measures are recommended for the City's proposed redevelopment of the Property:

- Demolition of existing structures and establishment of institutional controls. A CMMP will be prepared and implemented for the Property.
- Excavation with off-site disposal and dewatering. Potentially impacted soil may be removed during regrading and utility installation. Dewatering (and treatment) may be needed for utility trench installation.
- Vapor barrier and passive venting system. This engineering control includes a subslab vapor barrier and passive SSD venting system, which would be installed beneath the new building at the Property.

- Impermeable cap. This engineering control includes an impermeable (asphalt) cap that would be constructed in the proposed plaza area.

The estimated cost to implement the preferred alternative is approximately \$292,000, as shown on the attached table.

LIMITATIONS

The services undertaken in completing this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

REFERENCES

AECOM. 2017. Fourth quarter 2016 groundwater and soil gas monitoring report, Shell service station (SAP No. 121438), 6055 SW Hall Boulevard, Beaverton, Oregon, DEQ LUST: 34-06-0149. August 2.

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GeoDesign. 2017b. Hazardous building materials survey. Prepared for Beaverton Police Department. GeoDesign, Inc. September.

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URS. 2012b. Conceptual site model addendum Phase II site assessment. Prepared for Department of Environmental Quality. URS Corporation. December.

URS. 2013. Additional site investigation report, Shell service station (SAP No. 121438), DEQ LUST: 34-06-0149. URS Corporation. Prepared for Oregon Department of Environmental Quality. October.

USEPA. 2014. Checklist: how to address changing climate concerns in an analysis of brownfield cleanup alternatives (ABCA). April.

Application for Federal Assistance SF-424

* 1. Type of Submission:

- ☐ Preapplication
☒ Application
☐ Changed/Corrected Application

* 2. Type of Application:

- ☒ New
☐ Continuation
☐ Revision

* If Revision, select appropriate letter(s):

* Other (Specify):

* 3. Date Received:

11/16/2017

4. Applicant Identifier:

5a. Federal Entity Identifier:

5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name:

City of Beaverton

* b. Employer/Taxpayer Identification Number (EIN/TIN):

(b) (4)

* c. Organizational DUNS:

0707314500000

d. Address:

* Street1:

12725 SW Millikan Way

Street2:

* City:

Beaverton

County/Parish:

* State:

OR: Oregon

Province:

* Country:

USA: UNITED STATES

* Zip / Postal Code:

97005-1641

e. Organizational Unit:

Department Name:

Community Development Dept.

Division Name:

Economic Development

f. Name and contact information of person to be contacted on matters involving this application:

Prefix:

* First Name:

David

Middle Name:

* Last Name:

Tetrick

Suffix:

Title:

Economic Development Project Coordinator

Organizational Affiliation:

City of Beaverton

* Telephone Number:

5035262537

Fax Number:

* Email:

dtetrick@beavertonoregon.gov

Application for Federal Assistance SF-424

* 9. Type of Applicant 1: Select Applicant Type:

C: City or Township Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

* 10. Name of Federal Agency:

Environmental Protection Agency

11. Catalog of Federal Domestic Assistance Number:

66.818

CFDA Title:

Brownfields Assessment and Cleanup Cooperative Agreements

* 12. Funding Opportunity Number:

EPA-OLEM-OBLR-17-09

* Title:

FY18 GUIDELINES FOR BROWNFIELDS CLEANUP GRANTS

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Add Attachment

Delete Attachment

View Attachment

* 15. Descriptive Title of Applicant's Project:

Public Safety Center Brownfield Remediation Project

Attach supporting documents as specified in agency instructions.

Add Attachments

Delete Attachments

View Attachments

Application for Federal Assistance SF-424**16. Congressional Districts Of:*** a. Applicant * b. Program/Project

Attach an additional list of Program/Project Congressional Districts if needed.

17. Proposed Project:* a. Start Date: * b. End Date: **18. Estimated Funding (\$):**

* a. Federal	<input type="text" value="200,000.00"/>
* b. Applicant	<input type="text" value="40,000.00"/>
* c. State	<input type="text" value="0.00"/>
* d. Local	<input type="text" value="0.00"/>
* e. Other	<input type="text" value="0.00"/>
* f. Program Income	<input type="text" value="0.00"/>
* g. TOTAL	<input type="text" value="240,000.00"/>

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

- ☐ a. This application was made available to the State under the Executive Order 12372 Process for review on .
- ☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- ☒ c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**☐ Yes ☒ No

If "Yes", provide explanation and attach

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: * First Name:

Middle Name:

* Last Name:

Suffix:

* Title: * Telephone Number: Fax Number: * Email: * Signature of Authorized Representative: * Date Signed: